

PART I

INTRODUCTION AND METHODOLOGY

CHAPTER 1 OUR ASSIGNMENT AND ITS DIFFICULTIES

The Department of Applied Economics was asked by the Treasury to prepare an independent and impartial assessment of the effects of the Selective Employment Tax (SET), with the following terms of reference:

To examine and report on the effects of the Selective Employment Tax on prices, margins and productivity in industries on which the tax falls as a net burden and the consequent effects on the economy generally.

This is a vast field for research, the size of which can be broadly seen from Table I.1. This shows that the number of employees for whom SET was payable (without a full refund) was about 7.5 million or some 33.2 per cent of the total number of employees in Great Britain.

What the table cannot show is the great complication which springs from the large number of different trades, professions, or other activities which the tax covers. It is clearly impossible to research into the effects of the tax on the distributive trades, for example, without differentiating between a retailer of groceries and a scrap metal merchant: in the course of the research underlying this First Report, which covers the distributive trades, we in fact used fourteen different questionnaires, and even so we did not cover all the different types of distribution—whilst results obtained on one questionnaire had to be separately considered for different trades to which it was suitable. We had to select trades which we thought would illustrate the main problems arising in the distributive trades, since it would have been impossible to cover each sub-division of them individually.

This extreme diversity of the subject-matter to be covered by the research confronted us with a very awkward procedural problem so far as reporting is concerned. In view of our limited manpower, it was clearly necessary to proceed trade by trade, and to confine our initial enquiries to a part of the field; but ideally one would like to have the results of the whole research available, before reporting on any of it, partly because some of the problems should be considered in relation to the whole field, and partly because of the inter-actions between the various trades.

On the other hand, to wait until we had covered the whole field before making any sort of report would mean a very great delay before any visible results emerged from our activities, and we hope to learn from comments on our First Report things which will help in the production of reports on other trades, as well

as in our final review of the whole field. In addition there is much to be gained from the point of view of staff morale in having a concrete target of producing something within a relatively short period, and the necessity of finalising a report on part of the subject has in fact made us face various issues which might otherwise have been left in abeyance—with consequential gains to our conduct of the rest of the enquiry.

TABLE I.1 *Scope of Selective Employment Tax**

1958 SIC Classifi- cation	Brief Description	No. of Employees, June 1968
		Thousands
<i>Orders</i>		
XVII	Construction	1,506
XX	Distributive Trades	2,774
XXI	Insurance, Banking and Finance	665
XXIII	Miscellaneous Services	2,100
<i>Min. List Headings</i>		
709	Misc. Transport Services and Storage	81
871	Accountancy Services	91
873	Legal Services	110
879	Other Professional and Scientific Services	190
Total of Above Categories		7,517
<i>Total number of employees in G.B.</i>		22,645

Source: Department of Employment and Productivity.

* The SIC classifications shown are those in which it seems *likely* that the majority of the employees are liable to SET without refund. There are undoubtedly substantial numbers of employees who are liable in other SIC categories (e.g. educational or medical services); these categories have been omitted because refunds are probably obtained for the majority of employees, on the grounds that the employer is a local authority or a charity, or because the tax is paid by the Government and therefore cannot be counted as a net addition to the yield. On the other hand, a minority of the employees included in the table are exempted for one reason or another.

We therefore decided to accept the risk of producing reports covering separate sections of the field, whilst recognizing the need to postpone a full treatment of some issues until a Final Report which would bring together the whole results of the research. To some extent, the analysis of the separate sections has to include provisional findings on certain points which will need to be reconsidered in the light of the whole results, but we hope that this Report on the distributive trades can be regarded as more or less definitive as far as it goes.

Logical Problems

One problem arises in any research of this kind which is so important that it needs to be squarely faced at the outset. In talking about the 'effects' of SET, we are bound to judge them by making a comparison between what actually

happened and an 'alternative position', representing what might have happened if the tax had not been introduced. This 'alternative position' needs to be carefully defined, quite apart from the problem of assessing what would have happened under the circumstances envisaged. It is naturally tempting simply to produce an historical record of what happened, and compare the position before and after the introduction of SET, but by itself this can tell us little about the effects of the tax. However difficult it may be, an attempt *must* be made to allow for the fact that 'other things did not remain equal'.

To make the above point more specific, one can add that SET became effective in September 1966 just after the Government had announced (in July 1966) a whole package of measures to reduce the level of demand in the country. It would clearly be absurd to attribute all the results which emerged in the next year or two to the introduction of SET.

This problem leads to another one which is a source of great difficulty. Actions taken by businessmen inevitably reflect their reaction to a combination of all the various events which are taking place and affecting their business: consequently, it would be useless to ask them what actions SET by itself had led them to take, since in many cases it would be a *contributory* reason for something which they did in response to it and (for example) a rise in wages. The only possible approach is to start by finding out the historical record of what did happen, and then apply a statistical approach—assisted by questions to businessmen—to try to sort out the contribution which can properly be attributed to SET.

There is a further logical problem which is of great importance; the effects of SET are bound to be different in the long run, from what they are in the first year (or even two or three years) after the tax has been introduced. The familiar distinction between short-period and long-period effects is not a matter of abstract theory to be pushed on one side and forgotten, but a matter of very real importance for an assessment of this kind. It is necessary to say frankly that an investigation undertaken in the period open to us cannot hope to assess all the truly long-period effects of the tax.

One final point needs to be set out very explicitly to conclude this section. In 1966, SET was introduced as a net addition to taxation rather than in replacement of some other form of tax. Nevertheless, we conceive our task as being to assess what the effects of SET are, *as against having some alternative tax in its place*, or an increase in the level of some other tax. The nature and size of this alternative taxation needs very careful exposition, which will not be attempted until we produce our Final Report covering the whole research: but in a broad way the whole of our assessment of the effects of SET must be taken as showing the consequences of having this particular tax, rather than some alternative taxation which would (in a sense to be defined more carefully in the Final Report) have the same consequences for the over-all balance of demand and potential supply for goods and services taken as a whole.¹ Clearly, this alternative tax has to be conceived as having no *special* effect on the trades which are unable to recover SET, or on the consumers of their products: one possible way of picturing it would be to assume that it is a general 'value added tax', imposed at a uniform rate on all industries—but the mention of this particular alternative does not imply that there is any particular reason why it should be taken as an alternative in practice.

¹ It will be noted that the reference is to the *balance* between demand and supply, which may be affected by changes on either side, or on both.

Practical Problems

Apart from the logical difficulties inherent in research of this kind, there are a very large number of practical problems in the way of assembling the data which would be relevant, even for the establishment of the historical record of what actually happened. These are discussed in more detail in Chapter III, but it is useful to state in advance that in many cases the trades which pay SET are conducted by a large number of relatively small enterprises, which inevitably makes the collection of information a larger and more difficult task. The existing published and unpublished statistics in this field are far less adequate than they would be in (say) the field of manufacturing, and one can add the particular point that there is a great deal of over-lapping between different activities for which one would like to have separate statistics if the enterprises were organised in that way.

It is useful also to make one other general point which is important. The trades which pay SET without refund are frequently referred to collectively as the 'service trades' and this almost inevitably means that their output cannot easily be measured in quantitative terms. In the case of the distributive trades, with which this report is concerned, it is conventional to measure changes in their output by reference to changes in the 'volume' of goods sold (i.e. by changes in the *value* of sales, when adjustment has been made for changes in price), without making any allowance for changes in the quality of the service (e.g. speedy attention, good selection offered, willingness to grant credit). We have necessarily maintained this statistical convention for measuring changes in the volume of output, but have had to consider the question of service as a separate matter.

Finally, one special difficulty arises in considering the effects of SET, which is that the rate of tax has been changed twice since it was introduced in September 1966 (in September 1968, and in July 1969). There were also some less important changes which became effective in September 1967 and September 1968 when partial refunds were introduced for part-time workers and elderly workers respectively.

So far as this particular problem is concerned, we decided to concentrate our main efforts on an assessment of the effects of the tax at the original rates (under which the rate for a full-time man was 25s. per week). For our overall assessment, we have not made much distinction between the positions before and after the introduction of partial refunds for part-timers, so that the period up to September 1968 could be treated as more or less homogeneous so far as the tax-rate is concerned. This point was of great practical importance, as explained in Chapter III, in enabling us to use returns from a panel of businesses which did not all close their accounts on the same date: whatever financial year a firm used, we could always make a comparison between the last one which closed before September 1966 and one two years later, in which SET was at 25s. a week throughout the year.

In the event we also found it possible to form some judgments about the effects of the tax in 1968-9, but these judgments relate to a hybrid period and are based on less complete data. In subsequent Reports, dealing with other trades, it will become progressively more possible to make judgments about the effects of the higher rates of tax; but to preserve some unity in our main assessment this will probably continue to be on the same basis as in this First Report.

CHAPTER II THE LINE OF APPROACH

It has been suggested on a number of occasions that this investigation should focus on the question whether SET has achieved the objectives which the Government were seeking when they introduced it. This does not, however, seem to be a good line of approach to the matter for a number of reasons, of which two major ones are worthy of mention.

In the first place, an approach of this kind would be liable to carry the implication that where an objective was achieved, this would somehow be 'good'—although some people might consider the objective to be misconceived, and the result therefore *undesirable*. The object of the enquiry is to assess the effects of the Selective Employment Tax, not the Government's ability to prophesy the effects of its own actions.

Secondly, a list of Government objectives would inevitably be very incomplete as a guide to the field which we need to study. In the nature of the case, there are many 'effects' of a tax of this kind about which one would not expect the Government to express any particular objective: the White Paper on the Selective Employment Tax (Cmnd. 2986)—to which we were referred for an explicit statement of objectives—does not mention the words 'prices' or 'margins', which are two of the three items explicitly set out in our terms of reference.

I feel, therefore, that some other approach is essential, but it is perhaps worth stressing one point which arises from this consideration of 'the Government's objectives'. During the course of our research, the point has been put to us time and time again that 'SET has failed miserably in its basic objective of moving labour out of the service trades, and become nothing but a device for raising government revenue'. We have been left in no doubt that the unpopularity of SET is in large measure accounted for by the widespread impression that SET was 'put across' in 1966 *primarily* as a device for moving people out of the service trades and into manufacturing, with its revenue-raising effect kept well out of the limelight—and by the accompanying view that the influence of the tax on the distribution of labour has been very small, leaving the revenue-raising as the major result *in fact*. I do not regard it as part of my task to explain how this impression about the Government's objectives came to be so widely held, even by a very large number of generally well-informed people; but the general attitude to a tax is important for an understanding of its consequences, and our study of SET would be incomplete without a very firm statement about the unfortunate consequences of this impression, on which there is no doubt in my mind whatsoever.

NEED FOR A FRAMEWORK FOR ANALYSIS

Since an approach to our problems through the study of Government objectives is unsuitable, it was clearly necessary to find some alternative: so far as the study of the effects of SET on margins, prices and productivity in the service trades are concerned, our terms of reference effectively provide what is needed, but for a study of the consequent effects on the economy generally one must have some framework on which to rest the analysis.

In a general way, one can say that two sets of criteria are needed:

- (a) We need to know broadly what to expect as a result of the tax, at least in qualitative terms, so as to know what to look for.
- (b) We need some criteria for judging what is to be considered good or bad.

So far as the former of these is concerned, I am reprinting in Appendix A the final section of the London and Cambridge Economic Bulletin for June 1966, of which I was the author (although no author was named in the Bulletin). This provides, for those who choose to read it at this point in the exposition, a succinct statement of what I was expecting on *a priori* grounds at the time when the tax was being discussed in Parliament: there is something to be said for showing the preconceptions of a research-worker before he starts on his investigation! It also provides a synoptic view of many of the main problems which arise in considering the tax, and so gives a good introduction to a consideration of particular problems in more detail.

Three points should be noted in connection with this Bulletin analysis. First, this section of the article starts—as a link with the article's earlier discussion of the state of the U.K. economy—by emphasizing that 'the importance of the decision to introduce SET lies more in the fact that it constituted a net addition to taxation than in the special features of this new fiscal instrument'; this statement is clear evidence that, on a dispassionate analysis of the proposal, its main consequence would be to raise revenue, and so to influence the over-all balance between demand and potential supply. It was clearly the Government's hope—which our analysis will seek to test—that a good part of this 'influence' would consist in an increase in potential supply, through higher productivity in the service trades.

Secondly, the discussion of the effects of the tax as a fiscal instrument follows the convention which we are adopting in this Report—i.e. it examines the consequences of having that particular tax, rather than an increase in some other form of taxation. The section of the article which is reproduced is *not* concerned with the effects of raising the level of taxation.

Thirdly, the analysis in the Bulletin is necessarily *qualitative* on many matters, and indeed points to some extent to *alternative possibilities*. The role of the present enquiry is largely to translate this qualitative, anticipatory analysis into quantitative terms, in the light of the facts which have now become available: we shall try to see which of various possible outcomes has emerged (or how much of each), and to bring in other elements not included in the anticipatory analysis.

Thus the object of the present enquiry is to examine, in quantitative terms, such questions as:

- (i) How the tax is borne, as between higher prices, worse service, lower profits (and possibly wages) in the trades affected, or higher productivity in the use of labour and/or other inputs (as a means of avoiding any of the above burdens).
- (ii) What changes (if any) the tax has caused in the types of labour employed, the methods of organising the business, and so on.
- (iii) The market mechanisms by which these results have been produced (since this throws some light on what is to be expected in the future).

In all these matters we are concerned with the effects of SET, as discussed in Chapter I, and not simply with a historical comparison between the position in (say) 1965 and 1968. Moreover there is no reason to expect the answers to be the same for each of the various trades, or even for the various types of business within a trade.

Criteria of Judgment

Although the Bulletin article was primarily concerned with discussing what the consequences of SET are, rather than assessing their desirability, nevertheless it does include some explicit or implicit value judgments, one of which is examined more fully below. In this Report we shall again be avoiding value judgments as far as possible—particularly about the relative importance to be attached to one consideration rather than to another: in general, the results are stated, and the reader is left to make his own evaluation. Nevertheless, the views of the investigator inevitably do affect decisions as to what problems should be investigated and in what detail, or how the material should be analysed, or how much emphasis should be attached in the report to the various results when the writing-up stage is reached. Consequently, the following indications are put on record to illustrate my 'personal equation' in such matters:

(a) Need for realistic comparisons

I firmly recognise that no tax is likely to be perfect, and that with the large amount of Government revenue which is currently being raised the standard of comparison for assessing the effects of any particular tax is a fairly low one, rather than a theoretical 'ideal' tax which has no evil consequences. Thus in 1966 the most obvious question was whether the introduction of SET should be regarded as having more or less in the way of undesirable consequences than the *raising* of some other tax to give the equivalent *additional* revenue (recognising that most of the other taxes were already at rates where the adverse consequences of raising the tax would be greater, per £100 million raised, than the average of the adverse consequences caused by the tax at its existing level, again expressed per £100 million).

More specifically, if the two methods of raising revenue are to give equivalent sums, then one must consider in each case the costs of collection, the economic effects (including any beneficial ones), and matters of equity (whether amongst producers or amongst consumers). In making these comparisons, it is entirely natural that different people should attach different weights to (say) considerations of efficiency and considerations of equity.

The essential point is, however, that it is quite useless simply to point to some deficiency in the working of SET, or to an anomaly, or to some bad effect on the efficient allocation of resources or on equity, and consider that SET is 'condemned' unless that matter can be put right: it is essentially a matter of comparisons, and this Report is concerned only with providing the facts about one side of the matter.

(b) Equity and the tax system as a whole

In considering matters of equity, I follow the general line of most economists in considering that one must look at the system of taxation as a whole, in each of the two possible arrangements being compared, rather than look at the individual tax taken by itself. A single tax, taken by itself, may seem highly inequitable, but yet serve to improve the equity of the tax system as a whole.

(c) Direct and indirect taxes

It is sometimes argued that, as between rich and poor people, one should rely basically on a system of progressive *direct* taxation to do whatever is considered desirable in the way of reducing inequalities of purchasing power, and that *indirect* taxation should fall as evenly as possible on the various types of goods and

services (with a few traditional exceptions, such as alcoholic drink and tobacco). On the other hand, other people will argue that there should be a differential principle in the field of indirect taxation also, under which things which are considered to be luxuries should be taxed highly, and those regarded as necessities should be free from taxation or even subsidised.

Personally, I find myself wobbling somewhat indeterminately in the middle ground between these two views, with rather a presumption in favour of equality of effective rates of indirect taxation on different types of expenditure, except where there is some really good reason for having an unusually high or unusually low rate—a proviso which means, of course, that all sorts of people who share this view can come to very different conclusions on particular issues.

This is the point on which my discussion in the LCEB article (reproduced in Appendix A) clearly needs some elaboration. Under the heading of 'fiscal balance', I stated there that economic theory would support a more equal level of indirect taxation on consumers' goods and consumers' services: I did not examine the question whether the services might be regarded as more 'essential', and so deserving of a lower rate of taxation in the eyes of those people who attach importance to the second approach mentioned above. As a *general* proposition, the dogmatic statement made in my article was probably justified, since it would be hard to make a case for the greater 'essentiality' of services as a whole, in contrast with goods as a whole; but it *would* be possible—and indeed easy—to make a case for saying that certain types of service rank high on grounds of 'essentiality'.

I return to this subject later.

(d) *Inevitability of disturbances*

It is a plain fact that businessmen in particular industries are inevitably confronted with all sorts of changes in the conditions under which they work, many of them quite unforeseeable: this is an inevitable feature of a changing economic system, and social provision of various kinds is made to mitigate the effects of such changes on the individuals concerned (e.g. limited liability). I do not myself therefore attach very high weight to the disturbances of this kind which are caused by changes in taxation, if these changes on balance serve a good economic purpose: as a rule, most of the adverse effects last for a short period only, whilst the industry adjusts to the change.

Similarly changes in taxation may react adversely on particular employees, worsening their prospects and/or causing them to be dismissed (or not taken on). There are social provisions to mitigate the hardship here also, including redundancy payments and unemployment insurance benefits, and the full employment policy does much to see that hardships are short-lived. Consequently I do not attach high weight to these disturbances, the size and duration of which is usually much exaggerated.

Naturally, this does not mean that I am indifferent to such matters, and if the hardship (however temporary) arises from an 'anomaly' in the tax, rather than as part of its basic purpose, this clearly deserves attention.

(e) *Anomalies*

'Anomalies' in any particular tax seem to me to be serious *either* if they lead to wasteful use of productive resources *or* if they cause serious inequities to particular classes of producers or consumers. Of the two reasons, the first represents a direct loss to the British community taken as a whole, whereas the

second usually implies that one person's loss is somebody else's gain. Hence, so far as one can make such a statement, I am more concerned about the first type of anomaly than about the second—which means that it seems more worthwhile making an effort to cope with the first.

(f) *International trade*

With indirect taxes it is usually considered an advantage if they can be remitted on exports, and an equivalent tax imposed on imports—as happens, for example, with purchase tax. In the case of SET, however, which is related to employment in certain establishments rather than to the sale of particular goods, such remission and levy would in any case be difficult, and they also encounter problems of conformity with GATT (the General Agreement on Tariffs and Trade) and with EFTA; this applies even if, for example, it were proposed to grant exemption to establishments where their sales were predominantly for export.

The logical case for the above attitude to indirect taxes is not quite as strong as it might appear, but it would not be proper to examine the whole problem here: I have discussed the more important practical issues in an article in *The British Tax Review* for March 1958, entitled 'The Implications of a Free Trade Area for British Taxation', in which I was able to draw on experience as a member of the International Commission set up by the European Coal and Steel Community to consider the problem of the turnover tax in their common market. Four main points may, however, be briefly—if rather dogmatically—stated:

- (i) The logical case for remission of taxation from exports is *strong* in relation to those types of tax which fall only on a small range of goods (e.g. the beer duty), or which fall on a limited range of goods with quite exceptional severity (e.g. the use of sugar for producing manufactured foods). If remission were not granted, various exports which would clearly be in the national interest would not be undertaken, because the producers would have to pay such high taxes to the British Government.
- (ii) *General* indirect taxes (e.g. industrial rates, or cheque stamps), which affect most goods roughly equally, may quite logically be left 'un-remitted' on exports—and indeed usually are. Long-standing practices of this kind do not, in general, affect either the balance of payments or the choice of goods to be exported: their influence is primarily on the level of the exchange rate and/or the level of money wage-rates etc.
- (iii) From the point of view of the balance of payments, it is not *always* an advantage to remit taxation on exports, even with a fixed exchange rate etc.: the country's receipts of foreign exchange may lose more from the lower price charged to foreigners than they gain from the higher quantity sold. Nevertheless, in a competitive world it is probably wise for an industrial country to stick to the general rule of avoiding indirect taxes which fall on exports, so far as that is reasonably possible.
- (iv) The whole issue needs, of course, to be considered in the light of a *de minimis* principle: it is not fruitful to worry about small deviations from the 'ideal', where corrective action would be very difficult. Nevertheless, considerable care is needed in deciding what can be dismissed as '*de minimis*': in some cases, it might well be that a rise in the costs

of an export agent, which was equivalent to a small fraction of one per cent of the selling price of the article to the foreign buyer, would lead the agent to abandon that line of business because it would destroy his whole profit—and the result might well be that the goods were bought from a foreign supplier.

It will be necessary to leave our main discussion of the effects of SET on international trade until the Final Report, but the shape of the tax was clearly influenced by considerations related to international trade, and some provisional account must be taken of international trade considerations at various points in this Report.

SOME PRELIMINARY APPLICATIONS OF THE CRITERIA

The main application of these criteria to the case of SET will similarly be made in the Final Report, covering the application of the tax to all the trades which pay it, and using all the information which we have collected. Nevertheless, there are a few points on which it is useful to make some preliminary remarks, as a help to an appreciation of the effect of SET on the distributive trades: these issues are *important*—people's attitudes are much affected by what they believe about them—and the information which we already have is sufficient to dispel a great deal of confusion.

In this section, we will be considering the tax as a whole, rather than only its application to the distributive trades, but will be illustrating points largely by reference to them.

Costs of Collection of the Tax

To start with a relatively simple point, it is important to know whether the costs of collecting a tax are high or low relative to other possible alternatives which would yield the required amount of revenue; moreover in considering the question of 'costs', one needs to consider the costs imposed on those who pay the tax—or, in this case, who have to get it refunded—as well as the costs to the Exchequer.

This is a matter on which we have, as yet, done little research, but that little is sufficient to enable us to make a confident statement that the costs are in fact *low* in relation to the net revenue collected.

As we have encountered considerable misunderstanding of the position, it may be useful to add some qualitative explanations, even though we are not at the moment in a position to make these in quantitative terms. The widespread view that 'it must be a very costly process to collect the tax from everybody and then laboriously refund more than half of what has been collected' seems to play a significant role in making the tax unpopular.

The short answer to this point is, of course, that by making the initial collection apply to all employees who pay National Insurance, the costs of collection as such are extremely low—the main item being higher payments to sub-post-masters, whose remuneration is partly related to the value of the stamps they sell. With a much higher rate of stamp, there is an obvious need for more active enforcement measures to ensure that each worker has an insurance card, that it is duly stamped for each week, and that employees are not mis-classified as self-employed to escape SET: we have observed a number of 'straws in the wind' in the course of our work which suggest that all these points call for investigation.

Our most direct concern has however been with the accuracy of the statistics derived from the exchange of insurance cards, in which a deficiency of (say)

1 per cent makes a big difference to the movements in employment which are recorded: for revenue purposes some element of evasion is inevitable for almost all taxes.

An assessment of the effective costs in relation to the revenue becomes, therefore, a matter of relating the *cost of making refunds* to the *net revenue received* from those who do not get the refunds. The very natural, intuitive feeling that there must be something wrong about a system under which large payments are made, and then reversed, is on this occasion 'plain wrong'.

It appears from the limited information which we have collected that the costs to the Government of making the refunds are decidedly low as a percentage of the net revenue collected, when compared with other types of taxation. The truly relevant test is, of course, with a 'marginal' collection of revenue, for which the cost might be low if it were considered legitimate (for example) to raise the additional funds by increasing the rate at which some simple tax is levied: but in view of the objections on general economic grounds to increasing the rate of most taxes, it is difficult to avoid the conclusion that a realistic alternative to SET would have had to be *either* some other form of new tax *or* an increase in the rate or scope of some tax, to which there would be serious objections on grounds of equity or economic consequences, or which would have involved heavy collection costs if these were to be avoided by complicating the tax.

As regards the costs to the general public, as opposed to the Exchequer, it is obvious that one can express no more than a very broad impression, since firm data are not available and could not be collected. In the case of SET, however, these costs are essentially incurred by people who are wanting to claim refunds, and we did take the opportunity of asking manufacturers (whom we were approaching primarily for other reasons) about the difficulties involved in obtaining refunds. The impression which we have formed from this data, from discussions with Government representatives about the working of the tax, and from the infrequency of complaints in the newspapers about the 'burden of record keeping, paper work etc.' involved in obtaining refunds, is that the costs to the public created by SET are modest in relation to the revenue which it yields. Perhaps the very fact that the costs are incurred by people who get a refund as a result of their labours (rather than by people who are submitting tax returns, on the basis of which they would have to make payments) helps to make the work more tolerable, and of course it also means that the Government is largely spared the task of ensuring that the necessary returns are submitted.¹

The above discussion does not, of course, mean that SET is administered in an ideal way, or that it would be impossible to find ways of reducing the costs involved in the operation of collecting the tax from everybody and then refunding it to those who are not liable. The Chancellor has already announced that he hopes to collect the tax only from those who effectively bear it after the new National Insurance scheme is started in 1972. All that I am concerned to say is that this system, which seems so 'ridiculous' to many critics, is one which in fact enables the job to be done at relatively low cost both to the Exchequer and to the employers (taken as a group).

¹ The main grievance of the people who obtain refunds is usually centred on the fact that they have to make an interest-free loan to the Government, which may be embarrassing if they are short of liquid assets. From the point of view of assessing the cost to the *nation* (including the Government, as well as the tax payers) this loan question can be ignored.

Further research would make it possible to quantify a lot which has been stated dogmatically in this section in broad terms, but I have no real doubt that a full assessment would rate SET as an economical tax so far as administrative costs are concerned. It is doubtful however whether such research would be worth while: a tax may be given severe penalty marks, if it is expensive to collect, but it can attract few positive credit marks for cheapness in collection, however good its performance may be. For my own part, I am convinced that SET easily 'passes the qualifying test'.

Fiscal Balance

It is sometimes said of SET that it improves the equity, or 'fiscal balance', of our indirect taxes *when taken as a whole*, because SET is a tax on services, which in other respects are lightly taxed in comparison with goods. For the purpose of examining this statement, we make the traditional assumption that an indirect tax will be passed on to the buyer: this will need reconsideration in our Final Report.

There is a kernel of justification in this statement, as was recognised in my article in the London and Cambridge Economic Bulletin. If we divide the things bought by consumers into two classes, 'goods' and 'services', it is true that on average the former were more heavily taxed prior to the introduction of SET, and indeed still are; it is also true that this statement still holds even if we exclude from the 'goods' class the special cases—notably alcoholic drink and tobacco—on which an abnormal rate of taxation has traditionally been imposed. Moreover, we can go further and say that there were only a very few individual services (e.g. football pools) on which the rate of taxation came up to the average level for consumers' expenditure, and that this was still true even after the imposition of SET: consequently, we can say that in the case of nearly all individual services bought by consumers the imposition of SET served to reduce the degree of inequality in rates of taxation.¹

These facts do not, however, get us very far towards justifying the general statement under examination, because they are confined to services which are bought by individual consumers 'as such'; only a minority of the employees in industries which pay SET are engaged in producing such services—and this is true even if we disregard the large number who are in the construction industry, which obviously lies outside the scope of the general statement. Some of the other employees (e.g. those in accountants' offices) are engaged in supplying services to other businesses, to help them with the production of their own output: we cannot say anything about the true incidence of the tax on the accountants without knowing what happens to that output. Other employees in the SET-paying trades, such as the shop assistants, are supplying the general body of consumers, but they are not selling a separable 'service' at all—they sell goods *plus* service in one indissoluble package (though the service element in the package can, within limits, be made more, or less, elaborate). In the classification of consumers' expenditure, the whole amount paid to the retailers is classified to the type of *goods* concerned.

Since this point is of considerable importance, it may be as well to make plain what lies behind the traditional statement that, for example, cigarettes are more heavily taxed than shirts, which are in turn more heavily taxed than laundry services. This implies that the sum of the taxes imposed on all the various stages involved in importing the raw tobacco, making the cigarettes,

¹ As explained above, attitudes may vary as to whether this test is important or not.

and distributing them to the consumer are a bigger proportion of the final price of the cigarettes than the corresponding proportion for shirts or laundry services: we are not concerned with the taxation collected at the *separate stages* of these processes, but only with the *sum total* imposed on all the operations needed to enable the final consumer to be supplied, and the simplified convention is normally made that indirect taxes are passed on to the buyer. In this particular example, the position prior to the introduction of SET was that, apart from various indirect taxes of a general character (e.g. petrol duty), there was no important tax which fell on cigarettes except the tax on the raw tobacco (paid by the importer when it is removed from bond), whilst the shirts were liable to purchase tax (paid by the wholesaler) and the laundry services were exempt. If one believed in equating the total weight of indirect taxation falling on the three items, there would have been a case for lowering the tobacco duty and/or increasing the taxation on the others: if one regarded cigarettes as a special case, one could nevertheless argue that a tax should be introduced which fell on laundry services, and/or that the tax on shirts should be reduced, so as to get greater equality between these. What one can *not* do is to argue that considerations of equity justify a suggestion that there should be a tax on the distribution of cigarettes, or indeed on their manufacture, on the grounds that those stages of the process were untaxed: similarly the fact that there is a tax payable by the wholesaler of the shirts provides no reason why there should also be a tax on the wholesaling of cigarettes.

The same point may also be approached in another way. It is possible for a country to arrive at a uniform rate of taxation on all final goods and services by confining its indirect taxation to a uniform tax on value added in each industry, whatever its activity—i.e. whether it produces raw materials, manufactures, intermediate products, services for final use, services for intermediate use, or indeed anything else; this uniform tax on value added can of course also be coupled with some special taxes if, for example, the Government wishes to have a higher tax on cigarettes than on other goods. SET is in some respects akin to a value-added tax, but confined to certain industries. Thus it is applied without regard to whether the product is a final one or an intermediate, and so without any attempt (as under the purchase tax) to make it apply only at one step in the process leading to a final purchase by the consumer; moreover the amount payable by each industry is related to the amount of labour used *in that industry*, and not to the value of what it sells, which would also reflect materials purchased from other industries. In consequence, to take an example, SET represents a much higher proportion of the sales of laundries or hotels than it does for retailers, and we can think of SET as a tax which is imposed at each of a succession of industrial stages, on the basis of the work done at that stage.

The question is, therefore, 'what are the effects of applying this system to *part* of the industrial field on the fiscal balance of the system as a whole?'

The plain answer to this question is that such a partial application has very little in the way of clear implications for the fiscal balance of the system as a whole, if it is combined with a collection of other indirect taxes of a completely different character: the logic of the 'adding-up process' in the value-added tax is destroyed. The fact that the other taxes are concentrated on 'goods' and that SET is (in the main) applied to industries producing services does of course mean that it will ensure that there is some taxation on consumers' services; since most of these were previously exempt, this element of the tax was a move

towards equality of tax-rates on consumers' purchases. But this carries no implications whatever about the 'balance' effects of applying SET to industries producing services which are sold as inputs or supplied with goods; to study the consequences of SET in these wider respects requires a special analysis, for which my LCEB article sketched some of the elements.¹

Fiscal Balance in Relation to the Distributive Trades

So far as the distributive trades are concerned—which constitute the subject-matter of this Report—it is clear that their inclusion in SET has very little effect on the question of 'fiscal balance', because it imposes a tax on almost all the goods which the consumer buys. This tax is not, of course, a strictly uniform one, because goods which receive an elaborate system of distribution (taking wholesale and retail together) require more labour per £100 of retail sales, and so involve a bigger payment of SET: as, however, the introduction of SET involved an average payment of the order of £1 per £100 of retail sales, the variations about this figure between different commodities are not of much importance in comparison with other variations (e.g. in rates of purchase tax, cigarette duty etc.). Basically, we have a general rise in the total taxation falling on consumption goods, with little impact on the previously existing inequalities between different kinds: SET falls on the distribution of heavily-taxed cigarettes as well as that of untaxed newspapers.²

Four points are, however, perhaps worth noting:

(a) The fact that SET applies to all forms of distribution means that the housewife pays a tax on almost all the food which she buys—in contrast with the long-standing practice of exempting many foods from taxation. To some people this will appear as a convenient way round an outmoded shibboleth—and they may reinforce their argument with references to the 'breakfast table duties' on tea, sugar etc. which have at times been treated as an exception to the general practice. To other people, however, this device for getting round the traditional rule of not taxing basic food appears as a major departure from an important principle.

(b) The fact that distribution is included within the ambit of SET means, of course, that the imposition of SET on the suppliers of consumers' services (entertainment etc.) goes less far towards bringing the taxation of such services up to the average level applicable to consumers' expenditure.

(c) Like many other people, I regard it as 'equitable' that SET should collect less revenue in respect of things which are distributed on a cash-and-carry, self-service basis than when the same things are sold in ways which involve a

¹ A rather vivid way of seeing the irrelevance of the argument about 'goods versus services' might be set out thus: 'In itself, the argument that one will improve the fiscal balance of the system by imposing SET on so-called service industries ('because services are not taxed') has little more logic than saying that we should impose SET on raw material-producing industries ('because raw materials are not taxed'). The argument rests on a complete confusion between a classification of consumers' expenditure and a classification between industries'.

I hasten to add the general proposition that actions may be wise, even though the reasons given for them may reflect confusion of thought.

² Although this has little effect on the *difference* between the all-in tax rates on different articles, it does affect the *ratio* between them. Thus if, before SET, taxes represented 10 per cent of the retail price for clothing and 0 per cent for newspapers, SET might raise these figures to 11 per cent and 1 per cent. Some people regard such widening of the tax base as highly desirable, others condemn it—see text above.

more luxurious 'service'. In respect of this *differential* element of service, the application of SET to distribution can usefully be regarded as a tax on the (special) service supplied with the goods, even though the main tax is basically a tax on goods.

This point is not perhaps a very important one in quantitative terms, but it does reflect the idea of taxation being higher on an article when a greater amount of productive resources has gone into meeting the consumer's purchase. The same sort of case could be made for getting away from the flat-rate element in other forms of indirect taxation, and having a higher (or additional) tax on elaborately-produced cigarettes, petrol with additives, bottled beer etc. than on the plain version.

(d) The fact that the inclusion of distribution in the scope of SET has little quantitative impact on the fiscal balance of British indirect taxation taken as a whole is not, in itself, very important. If for the moment we concentrate on the distribution of goods destined for the British consumer we can regard the levying of SET on the distributive trades as equivalent (roughly) to a general tax on virtually all consumer goods, and it should be judged as such.¹

Employment as the Basis for the Tax

The adoption of employment as the basis for the new tax (rather than the value of what is supplied to the customer) has a very large number of consequences. The previous section discussed one important implication—the fact that it makes it possible to behave as if the tax were a sort of 'value-added tax', and extend its application beyond the realm of services supplied to consumers as such: one can fairly say that the tax could not have been extended to cover distribution and services rendered to other businesses without getting involved with refunds on purchased inputs, if it had been expressed as a flat percentage of the amounts charged to the customer. A number of other important consequences are explored briefly in my LCEB article (reproduced in Appendix A), and will be discussed more fully in the course of this and subsequent Reports.

It seems useful, however, to make a few points of a more or less technical nature here, because the article did not really deal with the matters sufficiently even for a preliminary view. In a sense, they are illustrations of the widespread consequences of adopting employment as the basis of the tax, 'largely for administrative reasons'.

First, even if one were wishing to confine the tax to services sold to consumers as such, the employment approach avoids a formidable battery of problems which would be involved in defining these services and their value, if the objective were to make the coverage anything like complete. Thus it would be very difficult to define the basis for the tax when dealing with the 'service' bought by the consumer from an insurance office, a building society or a bookmaker.

Secondly, if the intention is to cover distribution and services to other businesses, then a flat-rate tax on whatever is received from the customer would lead inevitably to complaints that it was outrageously harsh in cases where a dealer added only a very small margin to the cost of what he bought (with dealers in gold bullion and diamonds as leading examples); it would also accentuate the complaints about the discrimination involved where a wholesaler is acting as an intermediary between a manufacturer and a retailer, instead of leaving the manufacturer to cover that part of the distributive process.

¹ The reader is reminded that the whole analysis in this section rests on the assumption that SET is passed on to the buyer.

Thirdly, the use of employment as the basis for the tax in place of a tax on sales or a material input makes difficulties (as already noted) over the remission of the tax on exports, and so gives reasons why the scope of the tax should be defined in such a way as to minimise the incidence on exports, even though it may thereby accentuate anomalies in the home market.

Fourthly, the employment approach makes one kind of anomaly virtually inevitable, although some mitigations are possible: it virtually enforces the adoption of the principle that the various 'establishments' shall be classified according to whether their main activity falls within or outside the taxable sphere, and treats all employees in an establishment alike: thus, if the establishment is regarded as falling under distribution, the tax must be paid on all employees, even though some of them are engaged on manufacture, whilst all employees in an exempt factory escape, even though some of them are engaged in distribution or catering. In some circumstances, however, the 'establishment' can be 'divided' according to rules which enable the employer to claim refund for a separate manufacturing activity carried on in a predominantly distributive 'establishment'.

Fifthly, the fact that the tax payable is related to a cost item (labour) rather than to the value of the output means that it bears heavily on inefficient firms. This may be seen by taking a simplified case, in which two retailers are selling the same newspapers at the same price and with the same quality of service to the customer, but one is less efficient in his arrangements for collecting the newspapers, and so employs an additional man. He therefore pays more in SET, as a direct consequence of being less efficient: his profits were already lower than those of his rival, because he had to pay more in wages, and the difference is accentuated.¹

Finally, the exemption of self-employed people from the scope of SET is directly contrary to its logic, whatever approach may be adopted: it must be regarded primarily as a concession to administrative convenience (because of the enforcement problems) or to political susceptibilities.

SOME COMMON ARGUMENTS CONSIDERED

It may be useful to conclude this chapter by considering briefly some points which are commonly raised about SET, in order to show their relationship to the enquiry.

Selectivity

The selectivity of the tax is often attacked, as if there were something almost immoral about a decision to tax some people and not others: 'a general payroll tax would be quite legitimate, or a general tax on employment, but a selective one is wrong in principle.'

It will be apparent from the earlier part of this chapter that I regard arguments of this kind as misconceived. Most indirect taxes are 'selective' between different kinds of goods, and although one can make a case in favour of a uniform rate of indirect taxation on all final goods and services bought by the consumer, there is obviously an abundance of precedents for a selective approach. It is true, of course, that SET distinguishes between establishments which must pay and establishments which are exempt, rather than distinguishing between the

¹ It is interesting to contrast this with the position under a value-added tax (where the tax payable would be the same) and under corporation tax (where the efficient firm pays more). We express no opinion here as to which system is preferable.

articles which are liable and those which are not: this has certain complications, as we have seen, but can hardly justify an attack on the grounds that selectivity is wrong in principle.

I have already discussed the converse argument that a selective tax confined to services is justified by the fact that taxes on services are otherwise much lower than those on goods. I accept the need to consider indirect taxes *as a whole*, and there is a kernel of truth in the idea that services supplied to the consumer as such were under-taxed; but the case is very much weaker than it was represented to be when the Chancellor introduced the tax, and SET covers many types of service to which his arguments are not applicable at all.

The Nature of Services

We have frequently met the complaint that the application of SET to service trades only (including construction for this purpose) seems to convey an implication that these trades are in some sense 'inferior' and should be specially restrained—a point which the complainant naturally disputes. These complaints are sometimes linked with paragraph 4 of the White Paper on the Selective Employment Tax (Cmnd. 2986), which was produced when the tax was put before the House of Commons: this shows obvious disapproval of the fact that 'over 80% of the labour becoming available went into services of all kinds, including distribution and construction', and it opens with the statement that SET 'will have a beneficial longer-term effect by encouraging economy in the use of labour in services', with the apparent implication (drawn by nearly all our complainants) that the Government saw no corresponding need to encourage economy in the use of labour in manufacture.

On this, I would confine my remarks to the following brief points:

(a) It is my impression that the Government has ceased to use the kind of argument expressed in paragraph 4, or has at least shifted the emphasis in its case so radically as to render unnecessary a full examination of this unfortunate paragraph. It is perfectly possible to make a case for a selective employment tax without holding any such belief about the 'inferiority' of service trades—and my task is to analyse the consequences of SET rather than to study the reasons given for its introduction.

(b) To my mind, the growth in the number of employees in the service trades primarily reflected two things. Firstly, the changing pattern of the Community's demands, as it became richer, led it to want a big increase in services—including Government-provided services (e.g. education) which account for a large part of the increase.¹ Secondly, smaller improvements in productivity are to be expected with the passage of time, as between services and other types of activity (including agriculture). The answer would have come out somewhat differently if taxation on services had been raised earlier, but this would not have prevented the service trades from absorbing well over half of the labour

¹ This statement is basically neutral on the question whether the market mechanism leads, through the workings of imperfect competition, to more people being employed in service trades at any one time than the consumers 'really' want to have. There was no important *change* in the market mechanism over this period, so that the proportion of such excess employment may be assumed to have been much the same at the end as at the beginning, leaving the growth of demand to explain the growth in services supplied.

Naturally if one believes that this excess is important, that provides a case for measures to reduce it—which one hopes will genuinely improve efficiency. But a mere statement about the growth in numbers provides no evidence in favour of this belief.

becoming available. In any case, a large part of the increase in the labour force in service industries was in ones which were not subjected to SET (including employees of the Government and Local Authorities), and a figure related to *all* services is of little relevance to the case for SET.

(c) The implication in the White Paper that the growth of the service trades restricted the growth of manufacturing raises complex issues. To my mind, the really important point was for the Government to take action to bring the labour market into reasonable over-all balance, by eliminating the excess of demand over potential supply: so long as that persisted, both manufacturing and service trades were bound to suffer from unfortunate difficulties in recruiting labour. The crucial decision of the Government in 1966 was to introduce additional taxation (and other measures), so as to eliminate this imbalance.

(d) Even under conditions of some general labour shortage, I find it a bit difficult to accept the picture of manufacturing industry 'losing out' on a large scale to the SET trades in the struggle for what labour is available: we have certainly had plenty of evidence about the difficulties experienced by employers in the distributive and allied trades in attracting the labour which they wished to employ, even during a period of relatively slack conditions in the general labour market.¹

(e) There is obviously a strong case for 'encouraging economy in the use of labour' in *any* trade, whether service or manufacturing, and it is no part of my task to try to assess whether there is more scope for this in one sector or in the other. My job is to try to assess whether SET has increased productivity in the service trades.

Division between Services and Production

We have encountered in various places the argument that 'there must be something wrong with SET, because it is logically impossible to define the boundary between services and production, and SET is supposed to be a tax on services'.

To my mind, this kind of argument serves primarily to illustrate the dangers of treating a shorthand, approximate description of a tax as if it represented a fundamental principle. SET is not, and never has been, a tax which falls on all services and no goods, and the deviations from that picture of it are much more than minor concessions to the difficulty of drawing up administratively workable boundary lines. One very large industry producing goods—i.e. construction—has been included within the ambit of the tax from the outset, and the White Paper's references to '... services of all kinds, including ... construction' are powerless to convert an industry which is included in the official index of industrial production into a 'service' trade. On the other side, many important service industries are exempted by name—e.g. nearly all transport—or are virtually exempted because most of the workers work for an employer which is exempted by status—e.g. most educational and medical services are run by a Local Authority or a charity. The 'selection' of the industries to pay the tax

¹ As a sort of *obiter dictum*, I might add that the logic of the case for saying that manufacturing would 'lose out' seems to rest on the idea that the powerful demand for goods in the home market might be met by imports (in a way that is not possible with services), if British producers cannot deliver sufficient supplies sufficiently quickly, and similarly potential export markets might be missed: the excess demand would thus be translated into a deficit on the balance of payments. In order to cure the latter, it was however necessary to increase the incentive to export by means of devaluation, *as well as* reducing the level of internal demand: making more labour 'available' to manufacturers was not enough.

had to involve other principles besides the simple one of 'goods versus services', even though that may have provided an initial starting point. There is, for example, a case for exempting transport on the grounds that its cost gets included in the cost of many exports, and that there is no way of having a selective exemption for goods destined for export (or for the materials which will be used to produce them).

This absence of a single over-riding principle behind the tax—which seems to me quite inevitable—is something which arises in many other parts of the field of taxation, such as the boundaries of the various categories distinguished in the purchase tax. It means, of course, that decisions about the boundaries to the tax are much more open to argument, since they have largely to be taken on a pragmatic approach. It is clearly necessary to consider both the economic effects of including or excluding a particular trade, and also the need to make the boundary line administratively workable.

One point which is of peculiar importance in the case of SET springs from the fact that (as noted above) liability does not derive simply from the production of some particular service, no matter what kind of enterprise produces it, but attaches to particular establishments in respect of the whole of their employment, whilst other establishments are exempt, even though they may produce the same services as a sideline. It is not possible, with this type of tax, to avoid anomalies of this kind arising, but a careful choice of definitions can reduce their frequency and importance.

Perhaps one should stress that as the definition of the field to be covered by SET does *not* conform to any simple principle such as 'all services but no goods', there is nothing logically impossible about selecting other services which should be exempted or industries producing goods which should be included. The administrative objection to creating awkward precedents for exemptions is, however, one which commands my sympathy.

Transfers of Manpower

The argument has frequently been put forward that SET is misconceived (or should not apply to some particular trade) because its basic objective was to induce the transfer of workers from service trades to manufacturing, and many of the workers in the service trades are unsuitable for use in manufacturing, or would be unable to move to any suitable factory (e.g. because they are married women).

This argument seems to me to be based fundamentally on a misunderstanding both of the objects of the tax and of what would be involved, if the tax did induce some reduction in the labour force in a particular service trade. There is no need to repeat what I have already said about the failure of government explanations to make plain that the major objective of the tax was the collection of revenue, with the consequence of eliminating the imbalance between the demand for labour and the potential supply (which would affect other businesses besides the service trades).¹ The other half of the misunderstanding seems to me also to reflect mainly a poor explanation of what is involved when the size of the labour force in various industries is readjusted, and the probable size of the readjustment.

¹ In practice, this process of disinflation was bound to lead to some increase in unemployment, whatever method was adopted to reduce demand. The choice of SET did *not* mean that this unemployment would be all amongst workers from the industries which paid it.

In brief, the usual procedure by which an industry's labour force is reduced in size is mainly through the workings of normal wastage, *plus* possibly some voluntary transfers by the more active members of the labour force who foresee that prospects will be better elsewhere; the employers may still need to do some recruitment, in order to keep a balance between people with different skills and ages, but *reduced recruitment* is the main way in which a general factor such as the imposition of SET produces a release of labour to other industries. Moreover, manufacturing can benefit *indirectly* from the contraction in a trade subject to SET if workers transfer from it to some other occupation (e.g. in Local Government service), which thereupon becomes a less active recruiter of labour from the general market, and leaves more mobile people to go into manufacturing. Direct transfer from office cleaning to manufacture is *not* a necessary part of the process.

This process of relatively painless contraction of some trades, in order that others may expand, would clearly not be effective if there were to be a sudden, massive reduction in the demand in some trades, which would leave insufficient time for the process of natural wastage and voluntary transfer to prevent a large number of immobile workers from being left without any job; in our Final Report we will need to examine what has happened in this respect, taking account of the possibility that the people concerned may have simply withdrawn from the labour market, without registering as unemployed. An analysis of this kind cannot usefully be done on a 'trade by trade' basis, since the basic question at issue is whether the people involved have found jobs elsewhere, and this cannot be done simply by studying a single trade.¹

Nevertheless, there was strong *a priori* reason to expect that the 'losses' of labour-power through people being made redundant as a result of SET without being able to find other jobs would be small. In the first place, a reasonable analysis of the probabilities suggested that SET would produce only a small percentage reduction in the numbers employed in any trade, which clearly minimises the problem of transfers: there was no need for *everybody* in a trade to be suitable for transfer, or even for a large proportion to be suitable. Moreover, it is well known that the labour turnover in the service trades (and indeed in other trades also) is very substantial, so that voluntary wastage would be large and the people made redundant would be entering an active market: most of the immobile workers could reasonably expect to find a suitable job in their locality and leave more mobile people to go elsewhere. And it must be remembered that SET was not introduced in a period of slump, but at a time when the Government considered it vital to reduce the level of excess demand in the country.

All this does not, of course, mean that there will be no cases whatever in which SET led to somebody losing a job 'to no good purpose': the methods available for managing a modern economy are unfortunately not precise enough to avoid such losses, whatever form they may take, and it is an essential part of our social system to have arrangements for redundancy pay, unemployment benefit etc. which will at least mitigate the worst of any hardships which are created. The greatest risk of such 'pointless losses to individuals' would probably arise in cases where SET affected a trade which was declining anyhow, either through a transfer of demand to other things, or through changes in

¹ We will also seek to examine how far new-comers to the labour market have found it more difficult to secure employment, particularly when they are handicapped in some way.

technology which called for less workers: in such cases the adding of a second reason for contraction might mean that the natural recuperative forces making for absorption of people dismissed would be insufficient.

The Passing on of SET

We have encountered a variety of views about the passing on of SET, which may perhaps be illustrated by the following four examples:

(a) 'SET would have considerable merits if there were any really effective way of preventing traders from passing it on; but in practice there is no way of preventing this, so that SET is simply another way of adding to the cost of living, and the whole object of the tax is frustrated'.

(b) 'With most forms of indirect taxation the payer simply passes it on to the purchaser, but with SET this cannot in practice be done, so that it has led to the closure of many businesses and caused a lot of unemployment as a result'.

(c) 'It is monstrously unfair to expect a tax of 25s. a week to be met out of the exiguous or non-existent profits which one finds in this trade; the result is serious losses, since one cannot pass it on'.

(d) 'The increase in SET is supposed to have as one of its objects the restraint of consumer demand by an increase in prices, but the Government also says that we should not pass it on in the form of higher prices unless this is unavoidable. If we do not pass it on, how is demand restrained? What do the Government really want, and what would an economist expect to happen?'

Perhaps the simplest comment to make on these observations is that one of the major objectives behind this investigation is to find out what in practice does happen, or rather—since the answer will clearly not be the same in all trades or even in all circumstances within a trade—to find out under what circumstances the various possibilities materialise. The *a priori* expectations with which I started the investigation were outlined in my LCEB article, reproduced in Appendix A.

One point can, however, usefully be dealt with here, because it concerns a general matter of economic analysis: it arises most clearly on the fourth of the above quotations, but it is relevant to others also.

On page 6 we made the point that the introduction of SET in 1966, as a net addition to taxation, was mainly important because it improved the balance between over-all demand and potential supply. The *simplest* way to envisage this happening is the one implied at the beginning of quotation (d)—i.e. for the tax to be passed on in higher prices, so that consumers' total buying power is reduced in real terms, whilst potential supply is unaffected. This is however by no means the *only* way in which the result could be secured, as we can see from the following examples.

The first alternative is 'no rise in prices, no change in productivity', which implies a loss of profits in the service trades equal to SET: this outcome may well be considered unfair to the employers in those trades, but the loss in their income does reduce their demand for goods and services, so that the over-all balance is improved.

A second, and much pleasanter, alternative is for the tax to lead to a rise in productivity (possibly involving some worsening of service), which enables the employers to maintain their profits without putting up prices. Potential supply is then increased, because some labour and other productive resources are available for use in raising output elsewhere. Ideally, these would all be

absorbed and produce a corresponding rise in *actual* output: the aggregate buying-power of the consumers would then be the same as before the tax was introduced, but output would be higher, and the balance between demand and output would be improved (thereby improving the chance of a satisfactory balance of payments).

A third alternative is for the gain in productivity to be secured and prices to remain unchanged, but for the level of unemployment to rise, so that although *potential* output has been increased, actual output has not. Once again, however, the balance between demand and output has been improved, because the real buying-power of the unemployed has been reduced.

These three possibilities show that the basic objective—an improvement in the *relationship* between over-all demand and potential supply—is in no way dependent on the tax leading to higher prices. The quantitative influence of the tax on this balance will differ according to which of the various possible outcomes emerges—or, more plausibly, according to the proportions in which they are combined in the actual outcome. But that is not the matter under discussion, and one's preference between them must take account of other consequences to the economy as well as this one. Thus if the tax leads to higher productivity, that has the great advantage of raising the level of the real national income which is obtainable; and if the price-rise is moderated, whether or not because of an increase in productivity, this helps with the general problems of cost-inflation.

CHAPTER III DATA PROBLEMS

As was mentioned in Chapter I, the field of service trades is one in which data problems are particularly acute. Although the difficulties are not quite so great in the distributive trades (with which this Report is concerned) as in other parts of the field, nevertheless it was inevitable that we should find great difficulty in establishing even the 'historical record' of what in fact happened in the relevant years, let alone assessing what were the consequences of SET. This chapter is concerned solely with the establishment of the historical record, and many of the matters are dealt with in more detail in appendices: the methodological problems of disentangling the effects of SET are discussed in Chapter IV.

TWO MAIN APPROACHES

Two main approaches were open to us for establishing the historical record and we have tried to use both of them—partly to supplement one another, and partly to arrive at independent answers. They may be set out roughly as follows:

- (i) We could try to make use of the existing body of statistics on the distributive trades, which form part of the general body of published or unpublished statistics which stretches over the whole economy: thus one could expect to find relevant information within the general fields of national income statistics, labour statistics, prices and wages, output, profits etc. In addition, there are the special Censuses of Distribution, and some statistics collected by Trade Associations from their members.
- (ii) We could set about collection of special returns from a selection of the businesses concerned, either to supplement the existing aggregate statistics, or to obtain completely new types of information.

Obviously, we wanted to make the utmost use of existing statistics, but there was no escape from the labour of special enquiries.

Advantages and Weaknesses of First Approach

The great advantage of using existing statistics—apart from all considerations of economy—is that they are supposed to cover the whole of the trades concerned, whereas our own approaches could never expect to be comprehensive. Nevertheless, the limitations of the existing figures were so great that such an approach would obviously have been inadequate. It would be tedious to set out anything approaching a full list of these shortcomings, but the following point, can be taken as an indication of the need for special enquiries.

In the first place, the *Census of Distribution* is taken at intervals of about five years, and the last one relates to 1966.¹ This is the only source of official statistics which comes at all near to meeting our requirements, and it has been most valuable as a background; but as it does not extend beyond 1966, it can provide us with nothing which is directly useful for establishing the events which took place after the introduction of SET. All other sources of information are either

¹ The text relates to the position on retailing; on wholesaling the position is very much worse.

lacking in detail (e.g. division between the various types of retailing and wholesaling), or are confined to particular topics—and on certain topics (e.g. distributive margins) there is no other official source at all.

Secondly, it is well known that the *general* statistics which cover the whole economy—e.g. labour statistics, or the assessment of movements in the level of output—are at their weakest when it comes to the service trades. The special subject of labour statistics in the distributive trades is discussed in Appendix D, since it was necessary to make as good estimates as possible of the movement in the full-time equivalent of the labour force, and the existing published statistics are very weak on the subject of the self-employed and part-timers. Similarly, the indicators used for measuring the annual movements in the volume of output for the distributive trades are in part based on an indirect approach, and there is no assurance that this measure of changes in the volume of goods distributed is related to the labour recorded as being in the distributive trades.

Thirdly, the information which used to be made available by the *Inland Revenue*, showing the relationship between turnover and various profit measures for companies engaged in wholesaling and in retailing, has ceased to be available since the introduction of the corporation tax; in consequence, profit statistics for recent years are virtually confined to the single series for the distributive trades as a whole given in the National Income Blue Book (without any link to a turnover series).

Perhaps the most important point to make is, indeed, that in the absence of a post-SET Census of Distribution, there are really no existing statistics which present a comprehensive picture of the distributive trades: there are only bits and pieces which give a partial picture of selected aspects of the trades, which cannot be assumed to relate to a consistent definition of the trades, and which show little or nothing in the way of sub-divisions within a figure for 'the distributive trades'.

Advantages and Weaknesses of Second Approach

By contrast with the above, the direct enquiries which we made ourselves had the following great advantages:

- (a) They could be directly related to the problem in hand.
- (b) The results were a good deal more up-to-date than some of the general statistics (notably, of course, the Census of Distribution).
- (c) As the information related to the activities of specific firms, we could be assured that the coverage was the same for (say) the employment statistics and the sales statistics—although there were some difficulties over mergers and composite enterprises.

On the other hand, there were very substantial disadvantages, quite apart from the time and effort which the enquiries involved both for ourselves and for the respondents (including the Trade Associations, to whom we looked for both advice and information). It was quite clearly a case where we had to be content with second-best solutions: if we had attempted to put all the questions which we would have liked to have put, to all the firms from whom we would have liked to have answers, then the enquiry would have broken down completely.

More specifically, we had to recognise from the outset that our enquiries would be up against the following limitations:

- (1) Since we could not possibly go to every firm engaged in distribution, there would be a sampling problem, even if every enterprise which we approached would be able and willing to respond.

- (2) In fact, we knew that many enterprises (particularly the smaller ones) would not have the data which we wanted, so that it would be no use asking them questions to which we could expect satisfactory answers from other enterprises: in deciding on the scheme for selecting enterprises to approach, we necessarily had to recognise this constraint.
- (3) We knew that, even if the form were simplified 'to the limit of what was essential', there would be a considerable amount of non-response, which would often be 'justified' on the grounds that the staff had been so curtailed to meet the cost of SET that there was nobody to fill in the return.

This meant that we had inevitably to forego the attractions of a truly 'scientific' sample, because we knew that it would not remain scientific when the forms were returned, even if it started on that basis. We had to design a questionnaire which would yield useful results, even though the sample would necessarily be of the kind which is euphemistically described as 'indicative', and also to select the firms in such a way that this usefulness would not be destroyed by a significant amount of non-response. We also had to recognise that this non-response would be liable to grow impossibly large if we tried to impose strict rules aimed at making the figures for different years relate strictly to the same business in the same premises: amalgamations, extensions of premises and the like are so common that we had inevitably to accept figures which reflected these things as 'part of the historical record'.

RETURNS COLLECTED BY THE DEPARTMENT

The methods adopted by the Department for its enquiries are described at some length in Appendix B, which also reproduces some specimens of the questionnaires which we used. It may, however, be convenient to make a number of points briefly here, to show the strategy which was followed.

In the first place, we decided that the questionnaires should attempt to get two different types of information: the first was of an 'accountancy' nature, dealing with sales, margins, expenses, profits and the like; and the second was in a more qualitative form, dealing with the behaviour of the enterprise and its strategy since the introduction of SET. With a few exceptions, all the questions related to the actual course of events, rather than attempting to isolate what had been done 'because of SET': this reflected our conviction that, as most actions are taken for composite reasons and reflect the influence of more than one factor, questions of the latter type would not really be answerable. We did, however, invite respondents to make general comments, in which they were invited to indicate how important SET had been in leading to the results shown on their form; and we subsequently went to visit a number of the firms, and we used these interviews, *inter alia*, to explore this matter further.

We also decided, from the outset, that we would approach a large proportion of the very large firms, partly because their records are usually better and partly because much more information can be obtained from them, with a given amount of effort, than from approaches to other firms. We also decided that the proportion of firms to be approached would decline progressively as one moves down the size scale, but that we must include a substantial number of the smaller type of retailer, even though this meant that we had to adopt an interview approach rather than postal questionnaires for these enterprises.

Since a scientific sample, with precise sampling fractions, was impossible, we decided to adopt a very simple technique for combining the returns for

enterprises within a trade, in order to get figures for that trade: this was to express the required item for each enterprise as a percentage of its sales (or sometimes its employment, but *not* its profits), and to take an unweighted average of these ratios to give the corresponding ratio for that trade. Such a procedure can be 'justified'—insofar as anything can be justified with an unscientific sample—on the assumption that the fraction of enterprises of each size included in our sample declined proportionately to the enterprise's size, which very broadly reflected the principle which we had used in selecting the firms to be approached; it can also be regarded as a broad way of using all the results which were obtained as an 'indication' of what was happening in the trade. We were prepared, however, to make alternative calculations in cases where some other procedure seemed to be more justifiable for any special purpose; and in combining the results for different trades to get (for example) a single figure for the whole of retailing, we used the information from the Census of Distribution about the value of sales in each trade to give us our weights.

Having decided on the nature of the information which we wanted to secure, and drawn up a 'cock-shy' questionnaire as a basis for discussion, we normally approached the relevant Trade Association(s) to discuss the exact form of the questionnaire, to hear their views about problems affecting that particular trade which should be reflected in the questionnaire, and to obtain a list of names and addresses of the firms to be approached; typically, the Association(s) organised a meeting attended by knowledgeable members, and we are very grateful to all concerned for the assistance which we were given. In the special case of our questionnaire for larger retailers, which was our first venture, we started by visiting a number of individual firms to get the benefit of their knowledge before we approached the Associations, and we are particularly grateful for the help which we received at that stage.

The Trade Associations also played a very important role in persuading their members to fill in the forms which we sent out. We did not fully appreciate at the start how necessary it was to have the fullest co-operation in this respect, but after our first venture the typical procedure was that the Association sent a letter of support to each member who was to be approached.

Response to Postal Questionnaires

The response which we obtained to our postal questionnaires is discussed in Appendix B, with separate figures for the various trades. Allowance must, of course, be made for those cases where it would clearly have been inappropriate for the recipient to complete the form—e.g. where he was in fact engaged in some trade other than distribution as his main activity—but a simple summary gives a broad idea of the response.

It is our impression that the response was better from the very large firms, but we have no systematic way of checking this point: in a number of cases we were disappointed to meet a flat refusal from very large companies—e.g. Woolworths refused to be moved from their general rule of supplying no information, even in confidence, which they did not give to their shareholders.

It will, of course, be appreciated that the number of shops (or of wholesalers' premises) covered by the returns far exceeds the number of forms received, since Marks & Spencer (for example) counts as only a single return, but has many branches. The final column shows the sales in 1966, as providing some indication of the amount of business covered by the returns.

TABLE III.1

Response to Postal Questionnaires

Type of Business	Forms Sent Out	Usable Returns	Percentage Response	Sales on Usable Returns (1966 £ million)
Large Retailers ¹	317	132 ²	42	1,429
Wholesalers of industrial materials etc.	210	123	59	161
Other Wholesalers	311	173	56	491
Total	838	428	51	2,081

¹ i.e. those retailers who were sent the 'large retailers' form; 'smaller retailers', who were mainly covered by interview, are excluded from this table.

² Includes eleven returns (with sales of less than £150,000) used in the 'smaller retailer' enquiry.

As regards the smaller retailers whom we attempted to interview, the response was rather good. We sent a postal notification to 297 retailers announcing that an interviewer would be calling, and effective returns were obtained from 202 businesses.

Problems of Annual Data, Seasons etc.

In the main, we have had to work largely with annual figures, since for most businesses the 'accountancy' data are available only for the company's own financial year. The seasonal nature of the distributive trades would, in any case, make figures for shorter periods rather difficult to interpret.

This clearly raised a very difficult problem over the use of data relating to different financial years, especially in view of the changes which have been made in the level of SET. The best 'solution' we could find was to concentrate the *main* investigation on a comparison in each case between the last financial year which was closed before the introduction of SET, on the one hand, and a year 'two years later'—i.e. for companies using the calendar year as their financial year, we compared 1965 with 1967, but it gives a better idea of the general result to say that we compared 1965–6 with 1967–8. By good fortune, this rule means that whatever financial year a company uses, the comparison is between a pre-SET year and a year in which the rate of SET was 25s. per week for a full-time man. The intervening year was typically a hybrid, part of which was prior to the introduction of SET, and the proportion for which SET applied varied from firm to firm.

We have attempted to supplement this main investigation with some analysis of the effects of SET in the next following year (which we call 1968–9), even though the proportion of the year for which SET was at 37s. 6d. varies from firm to firm.¹ The number of firms for which we have this additional information

¹ The average terminal date for the accounts of our large retailers was just after the end of January, so that it is not very seriously amiss to think of our results for 1968–9 as a reasonable approximation to the results for the calendar year 1968—though coming a little later.

When we use aggregate statistics we use the plain calendar year.

These complications are of most importance in relation to 1966–7—a hybrid year to which we attach little importance.

is however rather smaller, quite apart from their mixed character in relation to SET, so that the results are less well-founded.

We have also attempted to make a less systematic analysis of some topics on the basis of questions which do not have to be answered in respect of a whole year, but again this information is less satisfactory than the main investigation.

CHAPTER IV DISENTANGLING THE EFFECTS OF SET

As explained in Chapter I, businessmen take decisions in the light of the combined influence of all the factors affecting them, and the effects of SET are spread over a substantial period, during which many things may change. Hence our basic approach to assessing the effects of SET had to be to find out 'what happened' over a period ('the historical record') and to use statistical methods to estimate what would have been the position, for a trade as a whole, in the absence of SET. We have used discussions with knowledgeable people about the affairs of their business or the trade in which they operate to supplement the purely statistical approach, but in the main this was to find out the manner in which SET influenced decisions, rather than to assess its quantitative effects: it normally operates as a *contributory* influence, so that (for example) it would not be meaningful to ask businessmen to attribute specific decisions to SET and add up the effects of these.

This statistical approach has been far from easy to execute, mainly because the basic data about what happened in the various trades before the introduction of SET is so sketchy. Each particular problem has had to be tackled separately, in the light of the data which were available, but it may be helpful to set out the underlying principle first. This was to look at the data for as many years before the introduction of SET as possible, in order to find out what determined the movements in the thing which we were studying: the external data for the years since SET were then used to 'predict' what the value of the item under consideration would have been, if the previous 'rules' had continued to govern it.

Putting the matter a bit more specifically, we typically found that the item in question showed a long-term *trend*, but that the figures for particular years showed deviations from the trend value which could (at least in part) be explained by 'conjunctural' factors—e.g. the general state of the economy, or the pace at which prices were rising (as compared with the average pace). One could then say that the item in question would, in the absence of SET,¹ have moved between 1965 and 1967 to the extent of two years' trend *plus* the differential effect due to the conjunctural factors being different in 1967 from what they were in 1965 (e.g. a recession in place of a boom).

It is probably helpful to illustrate these general considerations by looking at a (simplified) case, which will also show the relationship of our approach to other possibilities.

ILLUSTRATION FROM EMPLOYMENT AND PRODUCTIVITY

For our illustration we take the problem of employment and productivity in retailing, and we assume (to simplify the exposition of the principles) that

¹ Throughout this chapter (and indeed elsewhere) the phrase 'in the absence of SET' must be taken as shorthand for 'if SET had not been introduced but some equivalent increase had been made in other taxation'. We are *not* trying to assess what would have happened if the Government's fiscal policy had been less dis-inflationary, but only the effect of having this particular form of tax rather than some other.

there are figures available both for the output and for the full-time-equivalent of the numbers at work for each year from 1954 to 1968 inclusive. We also assume that figures are available for the various factors which we want to use to explain deviations from trend, and that these are available for the post-SET years as well as for the period 1954 to 1965, which we used to establish the previous 'rules of statistical behaviour'.

The object of the assessment might be described in two alternative (but related) ways:

- (1) To assess the effects of SET on *productivity*, for which we would compare the actual level of productivity in 1967 with the one derived from applying the rules to the outside data for 1967: the difference would be expressed as a percentage of the 'expected' level.
- (2) To assess the effects of SET on the *number at work*, by a corresponding exercise: the answer could be expressed as a percentage, or in thousands of workers.

Various possible approaches to this problem might have been adopted, and indeed many of them have been used by various people in the course of arguments about the effects of SET. We might arrange them roughly in order of increasing sophistication, and examine what would be implied if one in fact used such a method.

Straight Comparison of Employment

Perhaps because labour figures are more readily available than productivity figures (although in fact the published figures are full of statistical pitfalls), the commonest 'crude' approach is to compare the figures for the numbers at work in 1967 with those for 1965, and attribute the difference to SET. Such an approach assumes that all other factors except SET cancel out—e.g. that the rise in the volume of goods sold between 1965 and 1967 is balanced by the 'normal' increase in productivity, with other factors negligible.

Logically, there can be no defence for this kind of method, which would (for example) mean that if 1967 had been a year with an over-all unemployment of 20 per cent, then the large fall in employment in distribution would all be attributed to SET, rather than to the general slump. The best that can be said for this approach is that a number of the relevant factors happen to have some tendency to cancel one another out.

Employment Projection

A rather more sophisticated method is to fit a trend to the pre-SET figures for the numbers employed in retailing (or preferably their full-time-equivalent) and project it to 1967, so as to arrive at the number to be expected in the absence of SET.

This method assumes that the combined effect of all the factors tending to produce changes in the numbers at work would have been the same in 1965 to 1967 as they were in the pre-SET years. It takes no heed, for example, of any change in the rate of growth of the volume of goods to be sold—which might reflect the fact that 1967 was a much more 'depressed' year than 1965, or a shift in the destination of output between (for example) consumption and investment.

Assumption of Constant Productivity

The first two methods did not bring into the calculation any figures for the output of the retailers, either before or after the introduction of SET. It is

clear, however, that some allowance must be made for the change between 1965 and 1967 in the volume of goods to be distributed, and the simplest method of making an allowance is to *assume* that, in the absence of SET, productivity in retailing would have been constant. One then adjusts the 1965 figure for numbers employed by rule-of-three for the increase in the volume of trade between 1965 and 1967, and treats the resultant number as the figure for employment which would have prevailed in the absence of SET. By comparing this with the actual figure, the effect of SET on employment is readily found in terms of numbers, and the percentage difference gives the effect on productivity as a percentage.

The objection to this method is, of course, the absence of any justification for an assumption of constant productivity in the absence of SET. Analysis of the figures for the earlier years shows indeed that there was a significant upward trend, so that any calculation of the effect on productivity along these lines is biased in the 'favourable' direction on that account. On the other hand, the conjunctural factors happen, in the particular circumstances of 1965 to 1967, to have been working against the rise in productivity, so that the two factors have some tendency (on this occasion) to cancel one another out.

Productivity Projection

All three of the previous methods required no calculations of productivity for the pre-SET years—a great statistical simplification, but a quite illegitimate one: the 'obvious' elaboration of the last method would be to fit a trend to the pre-SET figures for productivity, and assume that that trend continued between 1965 and 1967, rather than assuming constancy of productivity. Given the figure for actual output in 1967, the computed figure for productivity enables one to arrive at the number of workers 'to be assumed in the absence of SET', which is then compared with the actual number.

The difficulty about this method is that the pre-SET figures for productivity show not only a significant upward trend, but also some fairly systematic deviations from trend, which are related *inter alia* to the state of the trade cycle. By assuming that, in the absence of SET, productivity would have moved simply along its trend line, the calculation ignores the difference between 1965 and 1967 in the 'conjunctural factors'—which was quite important.

Matching Periods

If one realizes that conjunctural factors are important, but is unable to translate that correct impression into an operational equation, then the attempt may be made to find one or more periods from the past in which the conjunctural factors seemed to be about the same as in 1965 to 1967, and (above all) to move in a similar way. One can then argue *either* that employment in distribution would have moved, in the absence of SET, in the same way as in that past period, *or* that productivity would have moved similarly: if the 'fit' of the periods is good, the two approaches should lead to much the same result, but the answers would not in general be identical, since history does not repeat itself so exactly. Thus the general position on unemployment in the whole economy may have been fitted very exactly, but the movement between the two years in the volume of goods to be sold may be somewhat different.

It is difficult to make much comment on this method in general terms, since one cannot know in advance how exactly the various things which *should* be matched will match in fact. In a broad sense, the method attempts to follow

the same line of approach as our preferred method; but it is at best an approximation, and may prove disappointing because the fit is not exact enough.

Econometric Approach

Our method was in fact to arrive at various plausible economic explanations of the movement in employment in the distributive trades from year to year, and to use an econometric approach to decide which of them gave the best explanation of what actually happened, and to establish the values for the various parameters. These parameters were then applied to the post-SET figures for the volume of sales and the relevant conjunctural factors, to give the numbers of people who might have been expected to be engaged in retailing if the previous rules had applied.

It is perhaps as well to recognize some of the logical weaknesses in this approach, over and above the weaknesses which are imposed by the poorness of the available statistics. Basically, they are of two main kinds:

- (1) The explanation of past events cannot possibly be perfect, so that the application of the rule gives results which are subject to a margin of uncertainty, which may be quite large in relation to the effect which one is trying to estimate.
- (2) One cannot assume that SET was the only 'special factor' which was operating in the period 1965 to 1967—or rather, one cannot assume that *all* the other 'special factors' are reflected in the explanatory variables which we use.

The second type of weakness is, of course, inevitable in all kinds of economic analysis: the appeal to what happened in the past as a guide to the developments to be expected in a subsequent period must always rest on assumptions about history repeating itself which are not fully justified. In this particular case, however, one should clearly note that there was another important 'special factor' besides the introduction of SET, which was the progressive breakdown of the system of resale price maintenance. There seems to be no logically satisfactory method of separating the effects of this from the effects of SET.

STATISTICAL INADEQUACIES

The previous section was dealing with the principles which we have sought to follow, on the basis that the statistics which we needed were available both for each pre-SET year and for the years since its introduction. This is undoubtedly the easiest way of expounding the logical problems, but it would be unrealistic to end this chapter without saying something about the devices to which we have been driven by the inadequacy of the pre-SET statistics on almost all the topics which we had to investigate.

A typical position (e.g. on gross margins) is that one has figures for the years in which a census of distribution was taken, but not for the intervening years. Moreover, for a variety of reasons the 1950 census is only of very limited use—partly because it relates to a period when rationing was still in force and many controls operated. Hence, even for retailing, one is liable to find that there are figures only for 1957, 1961 and 1966—and 1966 is not really acceptable for determining what happened prior to SET because SET was introduced in September of that year.

Manifestly, such an exiguous amount of data is not adequate for establishing both a trend and the conjunctural factors which influence deviations from that

trend. We were forced, therefore, to try to establish 'proxy' series from statistics which are available, which might reasonably be assumed to share some of the characteristics of the series in question. Thus it was possible to establish from the National Income Blue Book the figures for value added in distribution in each year and also the amount spent by consumers on goods which mainly pass through retailers' hands: the ratio of the former to the latter is somewhat analogous to a gross margin for the distributive trades, and whilst its upward trend could not be expected to be identical, the pattern of its deviations from trend might be expected to be broadly similar. Hence it seemed worth-while to examine the possibility of explaining these deviations in terms of conjunctural factors, with two main objectives:

- (1) Calculating a better figure for the trend than one would get by simply using the census figures as they stand, by adjusting them for their apparent deviation from trend.
- (2) Making an allowance, in estimating the 'expected' movement between 1965 and 1967, for the change in the conjunctural factors between those two years, as well as allowing for two years' trend.

One cannot, of course, be sure that a method of this kind will yield positive results, and each particular problem had to be considered separately. On the whole, we felt that our attempts in this direction gave us somewhat greater confidence in our answers, if only because it often emerged that the substitute series was very close to its trend value in the census years: this meant that the trend calculated from the census figures (possibly with some very small adjustments to reflect the fact that the proxy series was then slightly above or below its trend value) could be regarded as a much more reliable figure than one might expect from the fewness of the observations. In addition, the study of the deviations in the proxy series gave us some idea of the probable size of deviations in the actual one, and of their relationship to various conjunctural factors: this usually enabled us to make some improvements to our estimate of the 'expected' movement from 1965 to 1967 and to form some idea of the range of uncertainty, and we feel an added justification for our putting forward the results which we have obtained as the best that are within our power.

PART II

THE HISTORICAL RECORD

CHAPTER V HOW BIG A FACTOR IS SET

Our main investigation is concentrated on assessing the effects of SET when it was levied at the rate of 25s. a week for a full-time man, and 12s. 6d. for a full-time woman. It is a useful introduction to this problem to look at various ways of assessing how large a factor such a tax is in the case of the distributive trades: this chapter does not, therefore, seek to arrive at any answer about the effects, but simply to give the reader a general sense of the quantitative importance of this factor in comparison with others.

To avoid misunderstanding, I would like to emphasise that the rate of SET has twice been raised in comparison with the level used in this chapter, so that the figures given here understate the impact of SET as it is now charged. The main particulars about the rates charged for SET at various dates are given in Appendix G: as a broad order of magnitude, which is all that is required in this chapter, one can think of the current rates as being rather less than double the ones used in this chapter; on the other hand, some of the things with which comparisons are made (e.g. the values of sales per worker, or the level of wages) are rather higher now than they were in 1967-8, and this works to reduce the ratios.

One further point should be emphasised before starting on the figures, which is that SET does not apply to self-employed workers or to working proprietors etc. The importance of this factor for a consideration of retailing as a whole may be seen from the fact that the latest figures from the establishment tables in the 1966 Census of Distribution show some 501,000 self-employed workers, proprietors, family helpers etc. against some 2,055,000 employees—i.e. the self-employed etc. represented some 20 per cent of the total number of people engaged.

This raises a bit of a problem about how one should assess the importance of SET, since the proportion of workers who are not liable is naturally very much higher in the small businesses, especially the one-man or family shops. The inclusion of such businesses would, for example, lead to SET appearing as a lower percentage of sales for the whole of retailing than would be the case if the figures were confined to the businesses in which SET is in fact paid: this figure might therefore be regarded as a rather unsatisfactory hybrid, which grossly exaggerated the amount of SET for the very small shops, but understated it for the ones which are really affected.

For our enquiries, we have tried to omit shops and other businesses in which no tax was payable, because everyone was self-employed. Apart from anything

else, such small businesses are often unable to produce the necessary statistics; in addition, however, there seemed to be a positive advantage in confining the investigation to businesses which really pay SET, because it seems to be broadly true that these larger businesses 'set the pace' in such matters as the fixing of selling prices or margins. The analysis would be complicated if one were including in the figures businesses which had little influence on the outcome, but were highly peculiar in their SET position.

RELATIONSHIP OF SET TO WAGES

The introduction of SET had the effect on employers of raising the cost to them of each employee, and it is natural to start by asking how big this increase really was. Ideally, one should probably include in the previous cost a number of 'welfare' items, as well as the employee's wage or salary, commission, and National Insurance stamp (employer's share). For simplicity, however, it is probably sufficient to show a fairly typical figure for the earnings of a man or a woman engaged in distribution in 1966, *plus* the employer's share of the stamp, and to express the SET payment as a percentage addition to that. This picture is given in Table V.1 in which the final column is the really important one.

TABLE V.1 *SET in relation to Cost of Labour, 1966*
£ per week

	Typical Earnings	Employer's share of N.I. stamp	Total Cost pre-SET	SET	Percentage Addition
Man	15.0	0.667	15.667	1.250	7.98
Woman	9.0	0.567	9.567	0.625	6.53

In order to bring these figures into perspective, it is also useful to compare the addition caused by SET with the additions caused in a typical year by the raising of wages. This is not an easy figure to secure for the distributive trades, in which formal wage negotiations are conducted in a number of different divisions and hardly apply at all to some important parts of the field; on top of this, there is also the influence of wage-drift. In a broad way, however, one might say that SET was rather greater than the typical rise obtained by a worker between one year and the next over the period centred around 1966, and that this difference was considerably greater for a man than for a woman. By and large, therefore, one might say that the introduction of SET was rather more than equivalent to the inclusion of an extra year's wage increase in the cost figures, though one must take this as applying very broadly because of the incidence of the wage-freeze which occurred at about the same time.

Over-all Position

The above figures for specimen cases are useful insofar as they can be readily expressed in pounds sterling, and so make the matter more concrete than any general figures can. Nevertheless, it is obviously handy to have a summary figure, to represent the addition to the payroll cost which was caused by SET

covering men, women and juveniles together, and reflecting also the special arrangements for part-timers.

In our enquiries we found the annual expenditure of each business on its payroll, using a rather wider definition than was taken above so as to cover (for example) contributions by the employer to pension funds, but not including general expenditure of a welfare character. We also asked for the cost of SET in the year, and the result of expressing this as a percentage of the payroll cost (excluding SET) is shown in Table V.2 for the main types of business.

TABLE V.2 *SET as a Percentage of Payroll (excluding SET), 1967-8*

Type of Business	Percentage Addition to Payroll
Large Retailers	5.9
Smaller Retailers	5.2
Traditional Wholesalers	5.5

The types of business are described in Appendix B. Very broadly, 'large' retailers are those with an annual turnover in excess of about £150,000; 'smaller' retailers do not include one-man shops. 'Traditional' wholesalers are ones handling consumer goods, and exclude dealers in industrial materials etc.

This is not the place to discuss the fine points of definition, or to make elaborate comparisons between the figures for the different types of business. Essentially, one can think of SET as having added some 5 to 6 per cent to the payroll of the businesses, but of course there were particular cases where the proportion lay appreciably outside these limits.

SET IN RELATION TO SALES AND GROSS PROFITS

It is natural to ask, for any tax, how big an increase in the selling price of the business would be needed to cover the tax, and this can be seen from our enquiries by relating the payment of SET in 1967-8 to the sales in that year. In the case of distributors, however, it is rather doubtful whether such an approach is really the most helpful, since so large a proportion of the selling price is represented by the cost of the goods, and SET is basically a tax on the distributive process. Consequently, it is at least as meaningful to express SET as a percentage of the 'gross profit' of the business in question—i.e. the difference between the receipts from sales and the cost of the goods bought.¹ By expressing SET as a percentage of gross profit one can get an idea of the addition which the business would have to make to its 'charge for distribution', rather than to its selling price, in order to cover the tax.

Table V.3 gives the figures on both bases for each of the main types of business. As might be expected, SET is a much smaller percentage of sales for whole-

¹ Gross profit is not the same thing as 'value added', because only the value of the *main merchandise* is subtracted, and not other purchases (e.g. petrol or electricity). Gross profit has to cover all these incidental purchases, as well as local rates, wages, salaries, rent, depreciation, profits etc.

salers than it is for retailers, because much less work is done per £100 of sales in a wholesale business; when SET is expressed as a percentage of gross profit, however, this difference largely disappears—reflecting the tendency of SET to show some of the characteristics of a value-added tax.

TABLE V.3 *SET as a Percentage of Sales and Gross Profits, 1967-8*

Type of business	SET as a percentage of Sales	SET as a percentage of Gross Profit
Large Retailers	0.80	2.89
Smaller Retailers	0.55	2.29
Traditional Wholesalers	0.31	2.71

Wholesaling and Retailing Combined

So far we have been considering only the payment of SET by the business in question, without regard to the fact that when goods pass through the hands of both a wholesaler and a retailer the total amount paid in SET before the customer gets them will be greater than the amount paid at either stage separately.

It would be a very complicated matter to collect data which would quantify this point satisfactorily, but an approximation can be reached by taking the figure for each of the trade groups distinguished in our 'smaller retailers' enquiry, and 'matching' that group with one or more of our wholesaler groups as assumed suppliers. (To calculate the amount of SET paid at the wholesale stage on goods which are retailed for £100, one must of course allow for the fact that the wholesale value was lower, before applying the ratio of SET to sales for the wholesaler). The results are shown in Table V.4.

TABLE V.4 *SET at Wholesale and Retail Level, 1967-8*
(for 'smaller retailers', per £100 of retail sales) £

Trade	Retail Value	Wholesale Value	SET paid by:		
			Retailer	Wholesaler	Total
Food	100	79.1	0.58	0.16	0.74
Confectioners/Tobacconists/ Newsagents	100	83.4	0.24	0.18	0.42
Clothing and Footwear	100	69.0	0.69	0.39	1.08
Household Goods	100	70.0	0.65	0.31	0.96
Miscellaneous	100	70.0	0.52	0.35	0.87

Note It is assumed that all supplies came through wholesalers.

It will be seen that in some cases—notably clothing and footwear—the estimated amount of SET payable at the wholesale stage is substantial. In the case of the confectioners etc. the amount payable at the wholesale stage is much less than for clothing, but almost as big as the amount paid by the retailer himself: this is because a high proportion of the labour force in such shops are people for whom no payment of SET is due, because they are not employees.

To avoid any misunderstanding, I should perhaps close this section by emphasising that Table V.4 carries no implication about whether the tax at the wholesale stage is passed on to the retailer or not, or indeed about the incidence of the tax at the retail stage itself. The table attempts nothing more than an estimate of the tax which was paid, as a percentage of the value of the goods as bought by the final customer—and it does not attempt to bring in the (rather small) amounts of SET paid indirectly in respect of such things as repair work done for the shopkeeper by contractors.

SET IN RELATION TO PROFITS

With indirect taxation it is normal to assume that the tax will, at least in the long run, be passed on to the consumer in one form or another (or possibly offset by an increase in efficiency), so that one does not normally assume that the tax will have to be met out of the industry's profits: the breweries, for example, would be paying no dividends if the tax on beer fell on their profits. Nevertheless, in the case of SET the point has frequently been made that the tax *would* have to be met out of profits, so that it is useful to have a comparison between the level of tax and the amount of profit earned.

For the purpose of our enquiry, we decided that it would be best to measure 'net profit' as the amount available for remunerating the capital invested in the business, whether that capital is supplied by the firm itself, or obtained as a loan, or by renting the premises from a landlord: there are so many different ways in which a distributive enterprise may be financed that it seems more meaningful to take 'profit' as the combined income accruing to the business itself, the landlord, and the bank or other lender, since all these parties are providing part of the capital needed to enable the enterprise to run. For the business which owns its own premises and has no outstanding debt on which it pays interest, the profit as we have measured it is in fact its ordinary profit (except that we excluded any income on trade investments, gilt-edged securities or the like); for other businesses, we made the same exclusions, but did not subtract rent or interest from the trading profit.

With this technical introduction, we can pass to Table V.5, which relates the amount paid by companies in SET in their first financial year which was wholly subject to SET ('1967-8') to their profit in 1965-6 (their last year free from SET); it also relates the same SET payment to the profit earned in 1967-8, but for that year we take the profit *before* charging SET—since that corresponds with the common complaint that SET takes a large share of the enterprise's profit.

These figures can basically be left to speak for themselves as indicating the orders of magnitude involved. It must be emphasised however that the figures are only *averages*: as we shall see later, there are considerable variations between one trade and another within these broad groups, and between one firm and another within a trade.

TABLE V.5

*SET in relation to Net Profits**

Type of Business	SET in 1967-8 as a percentage of	
	Net profit in 1965-6	Net profit in 1967-8 after adding back SET
Large Retailers	14.8	12.0
Smaller Retailers	9.4	8.1
Traditional Wholesalers	16.0	14.0

* *N.B.* Profits are measured before subtracting rent, interest or direct taxation, but after depreciation and rates; income from investments etc. is not included.

Interest Rates

In view of the fact that the period under review was one in which interest rates were raised as a matter of government policy, it may be useful to give some statistical comparison between the magnitudes involved for the distributive trades through a 'requirement' to earn a bigger percentage on the working capital used in the trades, as against the statistical consequence of introducing SET.¹

Table V.6 shows, then, two things as a percentage of sales in 1967-8: firstly, the amount paid in SET; and secondly, the amount involved in raising the return on working capital by 1 per cent per annum.

TABLE V.6 *SET as against Higher Interest Rates, 1967-8*

Item	Large Retailers	Traditional Wholesalers
SET as a percentage of sales	0.80	0.30
Extra 1 per cent per annum on working capital, ¹ as a percentage of sales	0.126	0.085
Ratio, SET to 'extra 1 per cent'	6.5	3.5

¹ 'Working capital' = value of stock *plus* trade debtors *minus* trade creditors.

It will be seen that for the large retailers SET is 'equivalent' to a rise in interest rates of 6.5 per cent per annum, which would have nearly doubled them, but for traditional wholesalers the equivalent was an increase of 3.5 per cent per annum. Even for the wholesalers, there is little doubt as to which factor is the big one, especially as we have taken the higher interest rate as notionally applying to the whole of the working capital; in particular cases, however, the difference is a good deal less marked—for example, the textile wholesalers (who carry large stocks and give a lot of credit) show SET as 'equivalent' to an extra interest rate of only some 2.3 per cent per annum.

¹ This section does not, of course, represent any attempt to make a comparison between the causal processes involved in the two changes.

SUMMARY OF KEY RELATIONSHIPS

Finally, it may be helpful to bring together into one table some of the key figures for 1967-8, with all the items expressed as a percentage of turnover. This gives SET to two places of decimals, since it is the subject of the whole Report, but the table is intended to give relative orders of magnitude only.

TABLE V.7 *Some Key Relationships, 1967-8*
(All figures are percentages of turnover)

Item	Large Retailers	Smaller Retailers	Traditional Wholesalers
<i>Gross Profits</i>	27.6	24.0	11.1
<i>Expenses</i>			
Payroll (excluding SET)	13.5	10.6	5.5
SET	0.80	0.55	0.30
Rates	1.2	1.0	0.2
Other ¹	6.3	5.7	3.3
Total ¹	21.8	17.8	9.3
<i>Net Profit</i> ¹	5.8	6.2	1.8

¹ Rent and interest are not counted as expenses, but as part of the return to the providers of capital. For definitions, see Appendix B.

In the four chapters which follow, we examine the movement of these items during the years since the introduction of SET, and of productivity, which is related to them.

CHAPTER VI THE HISTORICAL RECORD ON GROSS MARGINS

The object of this chapter is to set out the facts which we have discovered about the size of gross margins¹ for different kinds of distributive business in each of the four years from 1965-6 (i.e. the last financial year of the business in question which ended before September 1966) to 1968-9. The figures for the last of these years are based on a smaller number of returns, but have been adjusted to be as comparable as possible; as our *main* investigation relates to the period when SET was charged at the rate of twenty-five shillings a week for a man, which is always true for 1967-8, we show the percentage movement in the margin between 1965-6 and 1967-8, and make comparisons (where possible) with movements over earlier periods taken from the Census of Distribution or other sources.

In considering the figures, it is of course important to remember that the prices of the goods distributed have in general been rising. A constant percentage for gross margin does not mean that the distributor has been charging the same amount for distributing a given quantity of goods, but rather that the amount which he charges for that service has been rising at the same rate as the price of the goods.

RETAILING

The basic figures for retailing are given in Table VI.1, which has separate sections for the large retailers and for the smaller ones.

Taking all the trades together, it will be seen that both sections show a rise in gross margins—the large retailers from 26.93 per cent in 1965-6 to 27.64 per cent in 1967-8, and the smaller ones from 23.48 per cent to 24.03 per cent. It so happens that the increase in the percentage is very close to the amount which SET represented as a percentage of sales in 1967-8, being slightly less for the large retailers (0.71 percentage points, against 0.80 per cent) but identical for the smaller ones. This must *not*, however, be taken as implying that SET has simply been passed on to the consumer: in this chapter we are concerned solely with the historical record of what happened, and not with causal analysis.

The danger of any such over-simple generalisation is, indeed, apparent from a scrutiny of the figures for the individual trades, for which significantly different movements are shown, with the increases in no sense matching the amount needed to cover SET.

There is a certain amount of similarity between the movements shown in the two sections of the table, with the biggest increases being in each case for food and clothing/footwear. Exact agreement was not, of course, to be expected: not only are there differences in the make-up of the groups between the small and the large retailers (e.g. as to the proportion of confectioners, tobacconists and newsagents), but within one trade we often found evidence of a different price policy. This seemed to apply, in particular, in trades where resale price maintenance had ended, with the large retailers tending to make more price cuts.

¹ All references throughout to 'gross margins' should be taken to mean 'gross margins as a percentage of sales', unless the contrary is explicitly stated.

TABLE VI.1 *Gross Margins as a Percentage of Sales for Retailers*

Trade	1965-6	1966-7	1967-8	1968-9 ¹	Percentage change 1967-8 c.f. 1965-6
<i>Large Retailers</i>					
Department Stores	30.54	30.96	31.94	31.86	4.58
Cooperative Societies	24.02	24.21	24.53	24.13	2.12
Food	21.20	21.77	21.93	21.56	3.44
Confectioners/Tobacconists/ Newsagents	20.11	19.47	19.67	19.78	-2.19
Clothing and Footwear	32.54	33.24	34.32	34.96	5.47
Household Goods	34.71	34.85	34.47	34.06	-0.69
Miscellaneous	32.45	32.48	32.29	32.45	-0.49
Weighted average, large retailers	26.93	27.30	27.64	27.54	2.64
<i>Smaller Retailers</i>					
Food	20.26	20.33	20.93		3.31
Confectioners/Tobacconists/ Newsagents	16.48	16.59	16.57		0.55
Clothing and Footwear	29.99	30.26	31.01		3.40
Household Goods	29.36	29.61	30.04		2.32
Miscellaneous	30.01	29.68	30.01		no change
Weighted average, smaller retailers	23.48	23.57	24.03		2.34

¹ Based on returns from over 80 per cent of the firms, using 1967-8 as a link.

For two categories we have figures only for the large retailers—i.e. department stores and cooperative societies. The department stores were rather consistent in showing an increase in gross margin, with an average rise of 4.58 per cent of the starting figure.

Finally, Table VI.1 also gives tentative figures for the large retailers for 1968-9, during part of which the higher rate of SET was effective, but these figures are based on a rather smaller sample. It will be seen that there was a slight fall in the over-all gross margin, and four of the seven groups showed falls.

Comparison with Census Movements

Table VI.2 gives a comparison between the rate at which gross margins were increasing between 1965-6 and 1967-8 and the corresponding movements for the periods between the various censuses of distribution—i.e. for 1957 to 1961 and 1961 to 1966. As these periods are of unequal length, the rate at which

the gross margin percentage was rising has been expressed as an annual, compound growth rate.¹

Considering retailing as a whole, it appears that the rise in margins was rather slower in the period from 1965-6 to 1967-8 than it had been in the periods between either of the pairs of censuses. This decline in the speed of growth would be reduced, but not wholly eliminated, if the measurement were expressed in terms of percentage points rather than as a compound growth rate, the figures being 0.33 percentage points a year from 1965-6 to 1967-8, as against 0.36 from 1957 to 1966.

The picture is, however, rather different if one looks at the trade groups separately, rather than dealing with a single aggregate. There is only one group which shows a really decisive reduction in the rate of growth of its gross margin, and that is the one for household goods; in this part of the trade, the ending of resale price maintenance was particularly important during 1965 to 1967. On the other hand there were marked accelerations in the rate of growth of gross margin for department stores, food, and clothing/footwear. The miscellaneous category should probably be counted as showing a lower rate of growth in gross margin, but there are difficulties over giving a properly comparable figure from the census.

TABLE VI.2 *Annual Percentage Movements in Gross Margins
for Retailers*
(The figures are percentage compound rates of change)

Trade	Period 1965-6 to 1967-8			Census Comparisons	
	Large Retailers	Smaller Retailers ¹	Combined figure ¹	1957-61	1961-66
Department Stores	2.26	—	2.26	0.43	1.05
Cooperative Societies	1.06	—	1.06	1.46	0.35
Food	1.71	1.64	1.68	1.59	0.41
Confectioners/Tobacconists/ Newsagents	-1.12	0.27	-0.12	1.80	-0.12
Clothing and Footwear	2.70	1.69	2.46	0.88	2.17
Household Goods	-0.34	1.16	0.19	3.36	1.88
Miscellaneous	-0.24	no change	-0.19	-0.32	2.26 ²
Movement in weighted average	1.31	1.17	1.27	1.59	1.34

¹ This does not cover retailers below the size which we sought to include in our enquiry: see Appendix B.

² The rise for this item is probably due in part to the effects of reclassification of certain businesses.

¹ This makes the figures comparable so far as the length of the period is concerned, and also comparable if one is concerned with the *proportion* by which the gross margin percentage rises in each year—i.e. if one wants to consider the pace to be the same if the percentage rises by one-hundredth of itself, whether the increase be from 20 per cent to 20.2 per cent or from 25 per cent to 25.25 per cent. For some purposes it may be more important to study the number of percentage points by which the gross margin percentage rises in a year, and in that sense the comparison given in the table understates the rates of increase in the later periods.

Trade Association Data

For some trades it has been possible to obtain data about the pre-SET period from other sources besides the Censuses of Distribution, and we have reproduced in Appendix C some information which we obtained from various trade associations, for which we are very grateful. Almost inevitably, the definitions are not identical, so that one cannot make direct comparisons of the absolute figures, but the movements between one year and another should be broadly comparable.

One of the great advantages of this additional information is that it is available for the full run of years over various periods, rather than for the isolated ones in which a census was taken. For that reason, we have left it as a connected set of statistics in the Appendix, and do not attempt to reproduce it all here.

On gross margins, the most relevant point is that the figures from the Retail Distributors Association and the Cooperative Union show a rather less rapid rise in gross margins over the period 1961 to 1966 than emerges from the Census.¹

WHOLESALE

The information which we have obtained about wholesaling is less satisfactory than for retailing, largely because this part of the distributive trades is much more complex. We have not attempted to cover all the trades, and we have left out 'brass plate wholesalers' and others who do not handle the goods or carry stocks. In addition, the Census information is both much less frequent and much less revealing.

We have divided the firms from which we obtained data under three main headings: traditional wholesalers, who distribute goods to retailers; wholesalers of perishable foods, who do of course supply goods to retailers but were distinguished from the traditional wholesalers mainly because many of them deal on a commission basis, and who do not have a 'gross margin' in the ordinary sense;² and industrial wholesalers.

The trades included in the industrial category can be seen from the bottom part of Table VI.3. These firms largely sell to *users*—manufacturers, farmers, builders and in some cases private consumers—rather than to retailers, but some of their sales are made to other distributors. An average figure for the various trades included in this category is given at the top of the table as a convenient means of getting a rough summary impression about movements in this section: the circumstances of the trades are very different, and no significance should be attached to the absolute size of these averages. There are, of course, many other types of industrial wholesaler: in particular, we have not attempted to cover the distribution of coal.

Most of the important traditional wholesale trades are represented in our survey, although there are a number of omissions. In the case of perishable foods, however, the coverage is confined to fruit and vegetables and poultry: we intended to cover meat also, but obtained insufficient co-operation from the

¹ In making these comparisons, it must be borne in mind that the Cooperative Union figures supplied cover a wider selection of commodities by including funeral, catering, laundry services etc., whilst the RDA figures include some shops (e.g. women's wear shops) which are not counted as department stores in the Census of Distribution.

² The method used for calculating something broadly equivalent to a gross margin for these trades is described in Appendix E, which also deals with other ratios based on the value of sales.

wholesalers of either imported meat or home produced meat. We did not attempt to cover milk (where very special considerations apply) or fish.

Comments on the Figures

The top section of Table VI.3 shows that the traditional wholesalers, taken as a single class, secured an increase in gross margin between 1965-6 and 1967-8 which was at much the same pace (2.7 per cent in two years) as was obtained by the retailers; it is also of some interest to note that the actual increase, from 10.78 per cent to 11.05 per cent, is again very close to the amount which SET represented as a percentage of sales in 1967-8 (0.31 per cent).

The gross margin for industrial wholesalers as a class also showed an increase between 1965-6 and 1967-8 which was at about the same speed as was experienced in the retail field, but for perishable foods there was a small fall in gross margins. For what they are worth, the tentative figures for 1968-9 for two of the three main classes show a sizeable increase compared with 1967-8.

Within the field of traditional wholesalers, the second section of Table VI.3 shows that each of the four groups distinguished had a rise in gross margin between 1965-6 and 1967-8, which continued in 1968-9. The rise was again particularly steep in the case of textiles and footwear; in groceries etc. the increasing use of cash-and-carry was important, and served to keep down the average gross margin.

TABLE VI.3 *Gross Margins as a Percentage of Sales for Wholesalers*

Trade	1965-6	1966-7	1967-8	1968-9 ¹	Percentage change 1967-8 c.f. 1965-6
Traditional Wholesalers	10.78	10.78	11.05	11.28	2.70
Perishable Food Wholesalers	11.23	10.84	11.14	11.04	-0.80
Industrial Wholesalers ²	18.39	18.62	18.78	19.21	2.12
<i>Traditional Wholesalers</i>					
Groceries, Confectionery and Tobacco	6.71	6.64	6.78	6.93	1.04
Textiles and Footwear	18.87	18.98	19.94	20.69	5.67
Electrical Goods and Hardware	17.09	17.17	17.35	17.43	1.52
Other Goods	14.84	15.04	15.15	15.19	2.09
<i>Industrial Wholesalers</i>					
Scrap Metal Merchants	18.28	17.50	19.28	n.a.	5.47
Steel Stockholders	16.42	17.75	17.64	17.36	7.43
Engineering Distributors and Machine Tool Merchants	19.19	19.24	18.92	19.23	-1.41
Agricultural Machinery and Tractor Dealers	19.30	20.07	19.42	n.a.	0.62
Agricultural Merchants	10.11	9.92	9.83	9.99	-2.77
Builders' Merchants	20.27	20.45	20.43	20.58	0.79
Woollen Merchants	25.16	25.44	25.97	28.34	3.22

¹ These figures are based on returns from a smaller number of firms, using 1967-8 as a link, and are tentative.

² Unweighted average for the industrial wholesale trades listed below.

The movements amongst the different types of industrial wholesalers showed substantial variations: these trades are discussed in Chapter XVIII, and no further comment is offered here.

TABLE VI.4 *Annual Percentage Movements in Gross Margins
for Wholesalers**
(The figures are percentage compound rates of change)

Trade	Enquiry Data 1965-6 to 1967-8	Census Comparison 1950-65
<i>Traditional Wholesalers</i>	1.35	0.3
Groceries, Confectionery and Tobacco	0.5	0.5
Textiles and Footwear	2.8	1.1
Electrical Goods and Hardware	0.8	0.1
Other Goods	1.0	-0.6
<i>Industrial Wholesalers</i>		
Agricultural Merchants	-1.4	0.0
Builders' Merchants	0.4	0.0

* Census data for other trades are not available. The reliability of the Census figures shown is discussed in the text.

Comparison with Earlier Periods

The only census comparisons which can be made for wholesalers have to be based on the 1950 Census of Distribution and the 1965 Inquiry into the Wholesale Trades. This is an unsatisfactory basis for measuring movements, partly because 1950 was a year in which abnormal post-war factors were still operating (particularly in some wholesale trades), and partly because a single figure for the average movement over such a long period may not be at all representative for the years immediately prior to the introduction of SET, which is what we really want.

Under these circumstances, Table VI.4 is presented more for the sake of logical completeness than for its inherent usefulness. For many of the trades there is no census comparison which can justifiably be included, even on that basis.

We have also attempted to secure useful data from trade associations, and the information which we have secured is set out in Appendix C. So far as gross margins are concerned, the most useful facts are probably that for groceries the gross margin rose over the period 1954 to 1965 at an average rate of 0.3 per cent per annum compound, whilst the margin for hardware declined over the same period at 0.1 per cent per annum compound. Over the shorter period from 1960 to 1965, however, the rate for groceries was declining at 0.6 per cent per annum compound, essentially as a reflection of increased cash-and-carry, whilst that for hardware was declining at 0.2 per cent per annum compound.

The Textile Distributors Association provided data from 1962 onwards, which they did not wish us to reveal in full detail. Between 1962 and 1965 this showed a rise at the rate of 5.7 per cent per annum compound, with a subsequent rise between 1965 and 1967 at 6.0 per cent per annum and between 1967 and 1968 of 3.3 per cent.

CHAPTER VII THE HISTORICAL RECORD ON EXPENSES

This chapter sets out the information which we have obtained on the expenses of the various classes of distributors, with some important sub-divisions—notably between payroll and other expenses. In connection with the latter, it will be remembered that we measure profit before any charge for rent or interest, so that these items are not included as expenses; but depreciation and rates are included, and separate figures for the latter are given.

All the figures are expressed as a percentage of the year's sales, so that one can obtain a figure for net profit as a percentage of sales by subtracting the expenditure percentage from the gross margin: the profit figures are given in Chapter VIII.

As with gross margins, it is important to remember the rise in selling prices when considering the significance of expenditure figures expressed in this form: a constant expense percentage means that costs have risen at the same speed as selling prices, not a constant expenditure per article sold.

Unfortunately, the data about earlier periods is extremely scanty, since the Censuses did not ask firms to return their total expenditure or profits.

RETAILING

Table VII.1 gives figures for total expenses (excluding rent and interest) as a percentage of sales for the various types of retailers, in the same way as Table VI.1 did for gross margins. It will be seen that the expense ratio rose between 1965-6 and 1967-8 for every entry in the table; the large retailers showed an average increase in their expense ratio of 6.0 per cent and the smaller ones an increase of 6.8 per cent.

It may be helpful to note straight away that even if SET is excluded, there would still have been a substantial rise in the expense ratio—as is shown in the final line in each section of the table. We shall, however, be looking at this matter in more detail later on.

The percentage rise varied quite substantially between trade groups in each half of the table, and there was not much similarity between the patterns: amongst the large retailers, it was the clothing/footwear group which showed the biggest rise (9.1 per cent), but in the smaller retailers the food group was exceptional, with a rise of 9.0 per cent.

The tentative figures for 1968/9 for the large retailers suggest that the rise in the expense ratio had levelled off: the aggregate showed virtually no change (whether or not SET is included), and there was a particularly noteworthy fall for the food group.

Comparisons with Earlier Periods

It is not possible to make any comparison with the movement in expense percentages from the Census, but Appendix C gives some data from trade associations. In the case of department stores and cooperative societies, this shows a rise over the period 1961-6 at an annual rate of around 2 per cent. For department stores, the increase between 1965-6 and 1967-8 was therefore

about the same as in the earlier period; whereas that for cooperative societies was rather faster.

TABLE VII.1 *Total Expenses (Excluding Rent and Interest) as a Percentage of Sales for Retailers*

Trade	1965-6	1966-7	1967-8	1968-9 ¹	Percentage change 1967-8 c.f. 1965-6
<i>Large Retailers</i>					
Department Stores	25.30	26.03	26.32	26.50	4.03
Cooperative Societies	18.99	19.61	20.50	20.38	7.95
Food	16.97	17.36	17.70	17.16	4.30
Confectioners/Tobacconists/ Newsagents	14.48	14.64	14.67	14.68	1.31
Clothing and Footwear	22.69	23.93	24.75	26.05	9.08
Household Goods	25.63	28.22	27.84	27.16	8.62
Miscellaneous	23.66	24.64	24.59	25.38	3.93
<i>Weighted average, large retailers</i>					
(a)	20.56	21.39	21.80	21.89	6.03
(b)	20.56	21.04	21.00	20.98	2.14
<i>Smaller Retailers</i>					
Food	14.64	15.21	15.95		8.95
Confectioners/Tobacconists/ Newsagents	10.86	10.99	11.61		6.91
Clothing and Footwear	23.40	24.08	24.91		6.45
Household Goods	21.29	22.11	22.75		6.86
Miscellaneous	18.43	19.00	18.56		0.71
<i>Weighted average, smaller retailers</i>					
(a)	16.66	17.23	17.80		6.84
(b)	16.66	16.95	17.25		3.54

¹ Based on returns from over 80 per cent of the firms, using 1967-8 as a link.

(a) Includes SET

(b) Excludes SET

Payroll

Table VII.2 gives figures for the payroll element of expenditure, again expressed as a percentage of sales, and adopting the same layout as for total expenditure. In this case, however, it seemed useful to give two lines for each trade group, one showing the figures including SET and the second the figures excluding SET. In both cases, the costs of National Insurance and pension fund contributions by the employers have been included, but not general expenditure of a welfare character.

TABLE VII.2

Payroll as a Percentage of Sales for Retailers

Trade	1965-6	1966-7	1967-8	1968-9 ¹	Percentage change 1967-8 c.f. 1965-6
<i>Large Retailers</i>					
Department Stores	(a) 16.32	17.35	17.46	17.78	6.98
	(b) 16.32	16.90	16.44	16.61	0.74
Cooperative Societies	(a) 13.54	13.96	14.56	14.36	7.53
	(b) 13.54	13.68	13.67	13.45	0.96
Food	(a) 10.51	11.13	11.17	10.94	6.28
	(b) 10.51	10.83	10.52	10.21	0.10
Confectioners/Tobacconists/ Newsagents	(a) 9.35	9.57	9.75	9.50	4.28
	(b) 9.35	9.37	9.13	8.80	-2.35
Clothing and Footwear	(a) 13.97	14.62	15.10	15.40	8.09
	(b) 13.97	14.26	14.34	14.54	2.65
Household Goods	(a) 15.87	16.97	17.05	16.68	7.44
	(b) 15.87	16.44	16.00	15.38	0.82
Miscellaneous	(a) 16.11	16.65	17.18	17.80	6.64
	(b) 16.11	16.25	16.38	16.73	1.68
<i>Weighted average, large retailers</i>					
	(a) 13.33	13.97	14.26	14.28	6.98
	(b) 13.33	13.62	13.46	13.37	0.98
<i>Smaller Retailers</i>					
Food	(a) 9.82	10.14	10.72		9.16
	(b) 9.82	9.80	10.14		3.26
Confectioners/Tobacconists/ Newsagents	(a) 5.84	6.21	6.46		10.62
	(b) 5.84	6.10	6.22		6.51
Clothing and Footwear	(a) 14.29	14.76	15.13		5.88
	(b) 14.29	14.47	14.44		1.05
Household Goods	(a) 12.45	13.12	13.66		9.72
	(b) 12.45	12.83	13.01		4.50
Miscellaneous	(a) 10.39	11.10	10.92		5.10
	(b) 10.39	10.84	10.40		0.10
<i>Weighted average, smaller retailers</i>					
	(a) 10.26	10.71	11.11		8.28
	(b) 10.26	10.43	10.56		2.92

¹ Based on returns from over 80 per cent of the firms, using 1967-8 as a link.

(a) Includes SET

(b) Excludes SET

When SET is included, both the large retailers and the smaller retailers showed a percentage rise between 1965-6 and 1967-8 for payroll which was slightly higher than the percentage rise shown in Table VII.1 for total expenditure. There were, however, quite substantial variations in the size of this percentage between one trade and another, and no simple generalization can be made about the comparison between the speed with which this item rose as against the speed for the total.

If SET is excluded, the large retailers showed only a very small increase in the payroll/sales ratio, from 13.3 per cent to 13.5 per cent over two years. The smaller retailers, on the other hand, showed a fairly substantial rise in the payroll cost even when SET is excluded.

Finally, the tentative figures for 1968-9 for the large retailers suggest that the rise in the payroll/sales ratio had slowed down, and even been reversed in some trades, but the aggregate still showed a small increase.

Comparison with Earlier Periods

In the case of payroll, it is possible to make some comparisons with results obtained from the Census, which are shown in Table VII.3. The Census figures are confined to wages and salaries (including commission etc.), but the exclusion of the relatively small item for employers' share of National Insurance etc. probably does not upset the figures for the *percentage movement* between years very drastically.

TABLE VII.3 *Annual Percentage Movements in
Payroll/Sales Ratio for Retailers*
(The figures are percentage compound rates of change)

Trade	Period 1965-6 to 1967-8				Census Comparisons	
	Large Retailers (including SET)	Smaller Retailers ¹ (excluding SET)	Combined Figure ¹ (including SET)	Combined Figure ¹ (excluding SET)	1957-61	1961-66
Department Stores	3.43	—	3.43	0.37	1.02	1.41
Cooperative Societies	3.69	—	3.69	0.48	3.09	1.43
Food	3.09	4.48	3.63	0.65	3.30	-0.75
Confectioners/ Newsagents/ Tobacconists	2.12	5.18	4.12	1.70	2.41	1.33
Clothing and Footwear	3.96	2.90	3.69	1.12	2.14	0.36
Household Goods	3.65	4.75	4.03	1.04	4.90	1.04
Miscellaneous	3.27	2.52	3.14	0.70	2.24	-1.11
Movement in weighted average	3.43	4.05	3.59	0.74	2.98	-0.10

¹ This does not cover retailers below the size which we sought to include in our enquiry: see Appendix B.

For the aggregate, the percentage rise in the ratio between 1965-6 and 1967-8 was clearly faster than in the interval between either pair of censuses if one

includes SET. If SET is excluded, however, the recent rise at 0.74 per cent per year comes in between the figures for the two earlier periods, and is less than a combined figure for the whole nine years would be.¹

Looking at the individual trades, it is generally true that the rise in the payroll/sales ratio was faster between 1965-6 and 1967-8 than it had been over the 1957 to 1966 period if one includes SET. If one excludes SET, the recent rise has been less steep for each trade except the confectionery etc. group, but it has generally been faster than over the second inter-Census period taken by itself (1961 to 1966).

The trade association data reproduced in Appendix C provides further information about the rise in the payroll/sales ratio in earlier periods.

Expenditure other than Payroll

Table VII.4 gives figures for expenditure other than payroll as a percentage of sales, following the same lay-out as earlier tables; since rates are an item of considerable interest and have shown significant movements, each row gives a figure in brackets to show how much of the expenditure was represented by rates.

The main feature of this table is probably the variability between trades in the movement shown between 1965-6 and 1967-8. Among the large retailers, three trade groups out of seven show a fall in this expense ratio, but clothing/footwear and household goods both show rises of about 10.6 per cent, and the aggregate increase was 4.15 per cent; the smaller retailers show variations between a rise of 8.7 per cent for food retailers and a fall of 5 per cent for 'miscellaneous trades' (in which pharmacists are the biggest component), and the rise for the whole section is 4.5 per cent. The one feature which is almost universal is a rise in rates as a percentage of sales—and even in this case the large retailers show no increase for the confectionery etc. group. Taking the aggregates, the ratio rose by 15 per cent for large retailers and 16 per cent for the smaller ones.

The tentative figures for 1968-9 suggest that the percentage for other expenses rose for large retailers in the aggregate compared with 1967-8. However, they show a particularly noteworthy fall in the case of food—which brought the figure down to a level below the 1965-6 starting point.

Comparisons with Earlier Periods

No information is available from the Censuses, but the Trade Association data make some limited comparisons possible. In the case of department stores and cooperative societies, this shows a rise in expenses other than payroll as a percentage of sales over the period 1961-1966 of around 3.5 per cent per annum. For cooperative societies the increase between 1965-6 and 1967-8 was therefore much the same; whereas for the department stores the experience for 1965-6 to 1967-8 was very different from that of the earlier period.

¹ In considering the decline in the payroll/sales ratio shown by the Censuses between 1961 and 1966, one must remember that this reflects the changing composition of retail sales between trades, as well as movements for the ratio within individual trades: if, for example, a bigger proportion of business was done in 1966 by trades in which the payroll/sales ratio was low, this reduces the overall ratio for retailing as a whole. For our investigation, we had to use the same weights for combining the trades in 1965-6 and in 1967-8 (based on the 1966 Census).

TABLE VII.4

*Other Expenses (Excluding Rent and Interest)
as a Percentage of Sales for Retailers*

Trade		1965-6	1966-7	1967-8	1968-9 ¹	Percentage change 1967-8 c.f. 1965-6
<i>Large Retailers</i>						
Department	Other expenses	8.97	8.68	8.86	8.69	-1.23
Stores	Rates	(1.22)	(1.39)	(1.41)	(1.33)	
Cooperative	Other expenses	5.46	5.65	5.94	6.01	8.79
Societies	Rates	(0.68)	(0.75)	(0.84)	(0.89)	
Food	Other expenses	6.46	6.23	6.53	6.22	1.08
	Rates	(0.72)	(0.77)	(0.82)	(0.83)	
Confectioners/ Tobacconists/ Newsagents	Other expenses	5.12	5.06	4.92	5.17	-3.91
	Rates	(0.84)	(0.78)	(0.84)	(0.95)	
Clothing and	Other expenses	8.72	9.31	9.64	10.66	10.55
Footwear	Rates	(1.93)	(2.13)	(2.20)	(2.19)	
Household	Other expenses	9.76	11.26	10.80	10.48	10.66
Goods	Rates	(1.57)	(1.78)	(1.78)	(1.67)	
Miscellaneous	Other expenses	7.56	7.99	7.40	7.58	-2.12
	Rates	(1.07)	(1.14)	(1.17)	(1.22)	
Weighted average, Other expenses large retailers Rates		7.23 (1.07)	7.42 (1.17)	7.53 (1.23)	7.61 (1.23)	+4.15 (+14.95)
<i>Smaller Retailers</i>						
Food	Other expenses	4.82	5.07	5.24		8.71
	Rates	(0.61)	(0.67)	(0.69)		
Confectioners/ Tobacconists/ Newsagents	Other expenses	5.02	4.78	5.15		2.59
	Rates	(0.69)	(0.86)	(0.95)		
Clothing and	Other expenses	9.11	9.32	9.78		7.35
Footwear	Rates	(1.40)	(1.56)	(1.71)		
Household	Other expenses	8.84	8.99	9.09		2.83
Goods	Rates	(1.33)	(1.36)	(1.46)		
Miscellaneous	Other expenses	8.04	7.90	7.64		-4.98
	Rates	(0.87)	(0.90)	(0.93)		
Weighted average, Other expenses smaller retailers Rates		6.40 (0.87)	6.52 (0.95)	6.69 (1.01)		4.53 (16.09)

The figures in brackets give the amount represented by rates, which is included in the main figure.

¹ Based on returns from over 80 per cent of the firms, using 1967-8 as a link.

WHOLESALE

For wholesaling, Tables VII.5 and VII.6 give the expense ratios which we have prepared for payroll and other expenditure respectively. We have not given separate rows for the rates element in the latter, since rates is a less important item for wholesaling: for traditional wholesalers it was equal to 0.19 per cent

of sales in 1965-6, rising to 0.22 per cent in 1967-8. The increase of one-sixth in this ratio is of some interest, but as the item is a small one it seemed better not to complicate the table by including it.

As with retailing, the rise between 1965-6 and 1967-8 in the payroll/sales ratio was rather steeper than for other expenditure—6.7 per cent against 5.0 per cent, in the case of traditional wholesalers—but if SET is omitted the rise for payroll becomes rather modest (only 1.1 per cent for traditional wholesalers).

As between trades, it is noteworthy that perishable foods show a very modest increase in the payroll/sales ratio; on the other hand the textile/footwear group show rapid increases for the payroll/sales and other expenditure/sales ratios.

TABLE VII.5 *Payroll as a Percentage of Sales for Wholesalers.*

Trade		1965-6	1966-7	1967-8	1968-9 ¹	Percentage Change 1967-8 c.f. 1965-6
Traditional Wholesalers	(a)	5.51	5.73	5.88	5.92	6.72
	(b)	5.51	5.58	5.57	5.58	1.09
Perishable Food Wholesalers	(a)	4.98	4.97	5.17	4.81	3.82
	(b)	4.98	4.85	4.91	4.55	-1.41
Industrial Wholesalers ²	(a)	8.04	8.51	8.82	8.85	9.70
	(b)	8.04	8.28	8.36	8.36	3.98
<i>Traditional Wholesalers</i>						
Groceries, Confectionery and Tobacco	(a)	3.44	3.48	3.59	3.69	4.36
	(b)	3.44	3.38	3.39	3.46	-1.45
Textiles and Footwear	(a)	9.58	10.22	10.76	10.64	12.32
	(b)	9.58	10.01	10.22	10.05	6.68
Electrical Goods and Hardware	(a)	8.37	8.84	8.82	8.88	5.38
	(b)	8.37	8.59	8.34	8.35	-0.36
Other Goods	(a)	8.07	8.46	8.46	8.37	4.83
	(b)	8.07	8.24	8.01	7.90	-0.74
<i>Industrial Wholesalers</i>						
Scrap Metal Merchants	(a)	6.98	7.00	7.93	n.a.	13.61
	(b)	6.98	6.87	7.50		7.45
Steel Stockholders	(a)	6.02	6.62	7.20	7.10	19.60
	(b)	6.02	6.48	6.85	6.68	13.79
Engineering Distributors and Machine Tool Merchants	(a)	8.99	9.72	9.74	9.96	8.34
	(b)	8.99	9.43	9.25	9.36	2.89
Agricultural Machinery and Tractor Dealers	(a)	10.18	10.72	10.49	n.a.	3.05
	(b)	10.17	10.30	9.82		-3.44
Agricultural Merchants	(a)	4.25	4.44	4.49	4.65	5.65
	(b)	4.25	4.33	4.28	4.39	0.71
Builders' Merchants	(a)	9.40	10.15	10.25	10.37	9.04
	(b)	9.40	9.85	9.69	9.74	3.09
Woollen Merchants	(a)	10.48	10.91	11.62	11.19	10.88
	(b)	10.48	10.72	11.16	10.96	6.49

¹ Based on returns from a smaller number of firms, linked through 1967-8.

² Unweighted average for the trades shown below.

(a) Including SET

(b) Excluding SET

TABLE VII.6

*Other Expenses as a Percentage of
Sales for Wholesalers*

Trade	1965-6	1966-7	1967-8	1968-9 ¹	Percentage change 1967-8 c.f. 1965-6
Traditional Wholesalers	3.20	3.25	3.36	3.39	5.00
Perishable Food Wholesalers	4.13	4.22	4.22	4.40	2.18
Industrial Wholesalers ²	6.78	6.86	6.92	6.94	2.06
<i>Traditional Wholesalers</i>					
Groceries, Confectionery and Tobacco	2.06	2.09	2.13	2.13	3.40
Textiles and Footwear	5.50	5.82	6.15	6.33	11.82
Electrical Goods and Hardware	5.35	5.17	5.38	5.27	0.56
Other Goods	3.84	3.83	3.95	4.02	2.86
<i>Industrial Wholesalers</i>					
Scrap Metal Merchants	7.10	7.10	7.61	n.a.	7.18
Steel Stockholders	5.12	5.87	6.14	6.72	19.92
Engineering Distributors and Machine Tool Merchants	6.12	6.10	6.13	6.19	0.16
Agricultural Machinery and Tractor Dealers	5.85	6.00	5.48	n.a.	-6.32
Agricultural Merchants	4.17	4.12	4.00	3.81	-4.08
Builders' Merchants	6.32	5.93	6.56	6.44	3.80
Woollen Merchants	12.79	12.93	12.53	12.10	-2.03

¹ Based on returns from a smaller number of firms, linked through 1967-8.

² Unweighted average for the trades shown below.

Comparisons with Earlier Periods

No direct comparisons of expenditure/sales ratios can be derived from the Censuses, even for payroll, because the 1965 Inquiry into the Wholesale Trades did not collect any information on that subject. For lack of anything better, we calculated a payroll figure for each trade in 1965 from the 1950 figure, by allowing for the proportionate change in employment shown by the two Censuses and assuming a proportionate rise in average earnings equal to that for industrial workers. This was then divided by the 1965 sales.

The result for traditional wholesalers was a rise of 39 per cent in the payroll/sales ratio over the 15-year period, equivalent to 2.2 per cent a year compound, but we cannot regard this as doing more than suggest that there was a fairly steep rise, which was particularly marked in the textiles/footwear group. In 1950 there were still shortages of some goods, which made elaborate sales organisations less necessary.

The data which we obtained from Trade Associations are summarised in Appendix C.

CHAPTER VIII THE HISTORICAL RECORD ON NET PROFITS

This chapter uses the figures for the difference between gross margin and expenditure to obtain figures for net profits as a percentage of sales in the various trades. It is particularly important to remember here that these profits are measured without any deduction having been made for rent and interest, for reasons already explained; local rates and depreciation have been subtracted, but not direct taxation. Fundamentally, the figures for net profits represent the return to the people who provide the capital used in the enterprise, whether they be shareholders, proprietors, landlords or financiers: they correspond with what appears in the enterprise's books in the case of an enterprise which owns its own premises and has no interest-bearing loans either inwards or outwards.

It is also important to remember that we are here concerned with the historical record only and that profits are particularly sensitive to the general state of the national economy.

PROFIT/SALES RATIOS FOR RETAILERS

Table VIII.1 gives the figures for profits as a percentage of sales, following the layout used in earlier chapters. It will be seen that this 'net margin' declined between 1965-6 and 1967-8 both for the large retailers (by 8.3 per cent) and for the smaller retailers (by 8.7 per cent). Indeed, the only category to show a substantial increase over this period in either section of the table is department stores, for which the net margin rose by 7.25 per cent.

The various trade categories show a rather different pattern of movements in the two sections of the table, with food, for example, having almost the biggest fall amongst the smaller retailers, but a slight rise of 0.24 per cent for the large ones. On the whole, the retailers of household goods tended to do badly, with a fall for the large retailers of as much as 27.1 per cent; on the other hand, the clothing/footwear group tended to do relatively well in both sections.

The tentative figures for 1968-9 show a further fall in the net margin secured by the large retailers.

Statistical Explanation of Fall in Profits

It is useful to see how the fall in the net profits/sales ratio emerged as a result of the rise in gross margin and the changes in various expense ratios, including the introduction of SET. Table VIII.2 gives this information in a convenient summary form for the various types of retailing.

It is, of course, impossible to say from an accounting table of this kind what the causal process behind the movements was, or which item on one side was responsible for some movement on the other. One might, for example, describe what is shown in the aggregate row, either for the large retailers or for the smaller retailers, by saying that the rise in gross margin just about balanced the extra cost caused by SET, and that the fall in the net margin was equal to the combined increase in payroll and in other expenses—with the latter being the more important item. Alternatively, one might say—rather less exactly—that the rise in the gross margin about covered the rise in the expenses apart from SET,

and that the fall in profits was about equal to the amount paid in SET—with the large retailers doing better than that statement implies, and the smaller ones worse.

TABLE VIII.1 *Net Profits (Before Rent and Interest)
as a Percentage of Sales for Retailers.*

Trade	1965-6	1966-7	1967-8	1968-9 ¹	Percentage change 1967-8 c.f. 1965-6
<i>Large Retailers</i>					
Department Stores	5.24	4.93	5.62	5.39	7.25
Cooperative Societies	5.03	4.60	4.03	3.76	-19.88
Food	4.22	4.41	4.23	4.44	0.24
Confectioners/Tobacconists/ Newsagents	5.64	4.83	5.00	5.09	-11.35
Clothing and Footwear	9.84	9.31	9.58	8.89	-2.64
Household Goods	9.08	6.62	6.62	6.89	-27.09
Miscellaneous	8.78	7.84	7.70	6.97	-12.30
Weighted average, large retailers	6.37	5.91	5.84	5.65	-8.32
<i>Smaller Retailers</i>					
Food	5.62	5.12	4.98		-11.39
Confectioners/Tobacconists/ Newsagents	5.62	5.59	4.96		-11.74
Clothing and Footwear	6.59	6.18	6.10		-7.44
Household Goods	8.07	7.49	7.29		-9.67
Miscellaneous	11.59	10.68	11.46		-1.12
Weighted average, smaller retailers	6.82	6.34	6.23		-8.65

¹ Based on returns from over 80 per cent of the firms, using 1967-8 as a link.

The figures for the individual trades do not fit at all neatly with the patterns described for the section aggregates, and must be left to speak for themselves.

Diversity of Profit Movements

Apart from the variations between trades noted in the last paragraph, there were also considerable variations between firms within each separate trade. This was, indeed, a feature of each of the ratios which we have been considering, but in the case of the movements in net margins it seemed useful to present a more formal account of it, which is given in Table VIII.3.

To construct this table, the movement in the net margin between 1965-6 and 1967-8 was calculated for each reporting retailer, and in each trade these movements were arranged in order, starting with quite large increases, and

ending with quite large decreases. The table shows for each trade the upper and lower quartiles for these figures, so that one quarter of the firms showed movements more favourable than the higher figure, and one quarter showed movements less favourable than the lower figure.

TABLE VIII.2 *Movements in Ratios Between 1965-6 and 1967-8 for Retailers*
(Each item is expressed as a percentage of sales for the year in question)

Trade	Gross margin	Payroll excluding SET	SET	Other expenses	Net margin
<i>Large Retailers</i>					
Department Stores	1.40	0.12	1.02	-0.11	0.38
Cooperative Societies	0.51	0.13	0.89	0.48	-1.00
Food	0.73	0.01	0.65	0.07	0.01
Confectioners/Tobacconists/Newsagents	-0.44	-0.22	0.62	-0.20	-0.64
Clothing and Footwear	1.78	0.37	0.76	0.92	-0.26
Household Goods	-0.24	0.13	1.05	1.04	-2.46
Miscellaneous	-0.16	0.27	0.80	-0.16	-1.08
Weighted average, large retailers	0.71	0.13	0.80	0.30	-0.53
<i>Smaller Retailers</i>					
Food	0.67	0.31	0.58	0.42	-0.64
Confectioners/Tobacconists/Newsagents	0.09	0.38	0.24	0.13	-0.66
Clothing and Footwear	1.03	0.16	0.69	0.67	-0.49
Household Goods	0.68	0.56	0.65	0.25	-0.78
Miscellaneous	no change	0.01	0.52	-0.40	-0.13
Weighted average, smaller retailers	0.55	0.30	0.55	0.28	-0.59
Combined figures	0.66	0.18	0.72	0.29	-0.55

In the main Table VIII.3 can be left to speak for itself. It will be seen that the diversity of movements between the two quartiles is less for the large retailers than for the smaller retailers in each trade group, although this difference is not very striking for the household and miscellaneous goods. Amongst the smaller retailers, at least one quarter showed a significant rise in their profit/sales ratio in every trade.

We also examined the forms for the large retailers who came above the upper quartile or below the lower quartile in each trade to see what the average characteristics of each group might be.

The first point to note is that there was a fairly well-marked tendency for the firms which showed a high increase in profit/sales ratio to have started at a level *below* the average; and conversely for those with a low increase to have started above the average.

As was perhaps to be expected, we found that the first group (with profits rising fastest) had the following characteristics in almost all trades: sales, gross margin and productivity rose by more than the trade average, whilst expenses (as a percentage of sales) actually fell for five trades, even though SET was included, and in the other two rose by less than the trade average. It was to be expected that firms with the best record for profit movement would show some of these characteristics, but one could not predict that they would show each of them.

TABLE VIII.3 *Inter-Firm Diversity of Movements in Net Margins, 1965-6 to 1967-8, for Retailers*

Trade	Average net profit/ sales ratio for trade in 1965-6 ¹	Movements in ratio for firms, 1965-6 to 1967-8	
		Upper Quartile	Lower Quartile
	per cent	percentage points	percentage points
<i>Large Retailers</i>			
Department Stores	5.24	0.51	-0.75
Cooperative Societies	5.03	-0.28	-2.20
Food	4.22	0.85	-0.49
Confectioners/Tobacconists/ Newsagents	5.64	-0.25	-1.05
Clothing and Footwear	9.84	0.61	-0.98
Household Goods	9.08	-0.70	-3.81
Miscellaneous	8.78	0.02	-3.64
<i>Smaller Retailers</i>			
Food	5.62	0.60	-2.04
Confectioners/Tobacconists/ Newsagents	5.62	1.76	-2.73
Clothing and Footwear	6.59	2.28	-2.27
Household Goods	8.07	0.78	-3.33
Miscellaneous	11.59	1.25	-2.52

¹ This column is included to give an indication of the level of profits in the trade in the starting year, against which the movements can be compared.

Similarly in the second group, sales, gross margin and productivity rose by less than the trade average in virtually every case, whilst the expenses ratio always rose by more than the average.

Another way of looking at the results is to compare the movements shown by the two groups for expenditure (as opposed to the movements in expenditure/sales ratios). We found that the first group had achieved its much greater rise in sales with a *smaller* rise in expenditure in six trades out of seven.

Comparison with Earlier Periods

There are of course no Census figures on which to base a comparison with earlier periods of the movement in the net margin. As part of the econometric work which we used for 'disentangling' the effects of SET, we took certain figures from the National Income Blue Book, so as to study the apparent movement in the profit/sales ratio for the distributive trades: details are given in Appendix F. The tentative outcome of that work was that there was no real tendency for this ratio to move either upwards or downwards over the period 1954 to 1965.

We also obtained some data from Trade Associations, which is summarised in Appendix C. It shows that over the period 1961-6 net profit fell as a percentage of sales.

PROFIT/SALES RATIOS FOR WHOLESALERS

Tables VIII.4 to VIII.6 give information for wholesalers on lines similar to that provided above for retailers.

As with the retailers, the dominant impression given by Table VIII.4 is of a marked fall in net margins between 1965-6 and 1967-8. For traditional wholesalers this was 12.3 per cent, and within that class the important textiles/footwear group showed a fall of as much as 20 per cent. The average of the movements for the seven types of industrial wholesaler was a fall of 13.9 per cent.

TABLE VIII.4 *Net Profit (Before Rent and Interest)
as a Percentage of Sales for Wholesalers*

Trade	1965-6	1966-7	1967-8	1968-9 ¹	Percentage change 1967-8 c.f. 1965-6
Traditional Wholesalers	2.11	1.84	1.85	2.00	-12.32
Perishable Food Wholesalers	2.14	1.68	1.77	1.87	-17.29
Industrial Wholesalers ²	3.75	3.43	3.23	n.a.	-13.87
<i>Traditional Wholesalers</i>					
Groceries, Confectionery and Tobacco	1.24	1.09	1.10	1.15	-11.29
Textiles and Footwear	3.83	2.98	3.06	3.75	-20.10
Electrical Goods and Hardware	3.51	3.28	3.26	3.31	-7.12
Other Goods	2.95	2.77	2.75	2.81	-6.78
<i>Industrial Wholesalers</i>					
Scrap Metal Merchants	4.41	3.55	3.98	n.a.	-9.75
Steel Stockholders	5.29	5.27	4.30	3.56	-18.71
Engineering Distributors and Machine Tool Merchants	4.13	3.45	3.33	3.38	-19.37
Agricultural Machinery and Tractor Dealers	3.52	3.60	3.57	n.a.	1.42
Agricultural Merchants	1.82	1.44	1.46	1.69	-19.78
Builders' Merchants	4.72	4.63	3.78	3.87	-19.92
Woollen Merchants	2.37	2.04	2.18	n.a.	-8.02

¹ Based on a smaller number of returns, linked through 1967-8.

² Unweighted average for trades shown.

TABLE VIII.5 *Movements in Ratios Between 1965-6 and 1967-8
for Wholesalers*

(Each item is expressed as a percentage of sales for the year in question)

Trade	Gross margins ¹	Payroll excluding SET	SET	Other expenses	Net margins
Traditional Wholesalers	0.27	0.06	0.31	0.16	-0.26
Perishable Food Wholesalers	-0.08	-0.07	0.26	0.09	-0.37
Industrial Wholesalers	0.38	0.31	0.45	0.14	-0.52
<i>Traditional Wholesalers</i>					
Groceries, Confectionery and Tobacco	0.08	-0.05	0.20	0.07	-0.14
Textiles and Footwear	1.06	0.64	0.54	0.65	-0.77
Electrical Goods and Hardware	0.25	-0.03	0.48	0.03	-0.25
Other Goods	0.30	-0.06	0.45	0.11	-0.20
<i>Industrial Wholesalers</i>					
Scrap Metal Merchants	1.01	0.52	0.43	0.51	-0.43
Steel Stockholders	1.22	0.83	0.35	1.02	-0.99
Engineering Distributors and Machine Tool Merchants	-0.05	0.26	0.49	0.01	-0.80
Agricultural Machinery and Tractor Dealers	-0.02	-0.35	0.67	-0.37	0.05
Agricultural Merchants	-0.32	0.03	0.21	-0.17	-0.36
Builders' Merchants	0.17	0.29	0.56	0.24	-0.93
Woollen Merchants	0.68	0.68	0.46	-0.26	-0.19

¹ The changes in gross margins include the (very small) changes in other trading income.

TABLE VIII.6 *Inter-Firm Diversity of Movements in Net Margins,
1965-6 to 1967-8 for Traditional Wholesalers*

Trade	Average net profit/ sales ratio for trade, 1965-6	Movements in ratio for firms, 1965-6 to 1967-8	
		Upper Quartile	Lower Quartile
	per cent	percentage points	percentage points
Groceries, Confectionery and Tobacco	1.24	-0.02	-0.52
Textiles and Footwear	3.83	0.20	-1.28
Electrical Goods and Hardware	3.51	0.52	-0.84
Other Goods	2.95	0.40	-1.01

The 'statistical explanation' of the fall in the net margin, given in Table VIII.5, shows that each of the two alternative descriptions mentioned above fits the facts fairly well, both for traditional wholesalers and for industrial: thus we can *either* say that the rise in gross margin roughly balanced the cost of SET, leaving the fall in net margin roughly equal to the sum of the increases in the other expense items (with payroll being much the less important); *or* we can say that the rise in gross margin covered the rise in expenses other than SET, leaving SET roughly equal to the fall in net profits. In the second of these summaries, however, it would be rather more accurate to say that the rise in gross margin *rather more* than covered the rise in expenses other than SET for traditional wholesalers, but *rather less* than covered it for the industrial wholesalers.

As for the large retailers, we examined the forms for the traditional wholesalers who came above the upper quartile, or below the lower quartile, in each trade to find out the characteristics of each group. There was a less marked tendency for the firms which showed a high increase in profit/sales ratio to have started at a level below the average, but in all four trade groups those with a low increase in profit/sales ratio started above the average. The other characteristics of the two groups were very similar to those for large retailers.

NET PROFITS ON CAPITAL

It was obviously desirable to collect information which would enable one to assess the movements in the return on capital for the various types of distributors, but the difficulties in the way of doing so at all comprehensively were insuperable. In particular, distributors follow very different practices in relation to their premises, some of which are owned by the distributor, whilst at the other extreme some are rented for a sum which is adjusted each year in accordance with the current level of market rents: in between, the figures for the amounts paid on leased properties may be quite close to current rack-rents, or may be little more than ground rents, or may reflect the conditions prevailing many years ago. To have attempted to collect enough information to present an economically meaningful statement of the return on capital would have meant making our questionnaire quite impossibly complicated, and thereby reducing the response rate to quite inadequate levels.

To give some idea of the movements in the rate of profit on capital we have therefore resorted to a rather crude method of adapting the information which it seemed possible to collect. Our main figures for net profits have, as explained, been set out without any deduction for rent, so that if they were to be used as they stand one would have to include a figure for the capital value of the premises, which we did not attempt to collect. It seemed better to try to arrive at figures which would broadly reflect the position which would have prevailed in each trade, if all the firms in it had been paying a full current rental for their premises. We could not hope to arrive at the *actual* rate of profit on capital which would have prevailed under such circumstances, but we believe that the figures given in this section provide some guide to the year-to-year *movements*, which is what is really needed.

In brief, our method was to collect figures for the rateable value of the premises used by each enterprise, and to assume that—for each trade as a whole—the current rental for each year would, on average, have been a certain

multiple of this figure.¹ This was subtracted from our profits figure to obtain the profits after rent.

As our measure of tenant's capital, we took the figures which we had collected for the value of stocks, *plus* trade debtors *minus* trade creditors: this is not of course a comprehensive figure—it omits vehicles and tenant's fittings, for example—but for the trade as a whole it represents the greater part of the capital, and *movements* in it should be a good guide to movements in the whole.

Comments on the Figures

The figures prepared in this way are given in Tables VIII.7 for large retailers, and VIII.8 for wholesalers.

Comparison of these tables with the ones giving the movement for profits as a percentage of sales shows that, in general, the percentage fall between 1965–6 and 1967–8 is substantially greater when capital is taken as the denominator. Thus in the case of the large retailers the drop is 20·9 per cent, against 8·3 per cent, the traditional wholesalers show a fall of 15·9 per cent in profit as a percentage of capital, against 12·3 per cent when using sales, and the average for the industrial wholesalers is a fall of 19·3 per cent, against 13·9 per cent.

This steepening of the fall in the rate of profit when capital is used as the denominator instead of sales does not appear to be due, in any significant measure, to changes in the capital/sales ratio, which seems to have fallen somewhat between these two years. Essentially, it reflects the fact that the movement in profits becomes less favourable when one has subtracted an allowance for the current market rental from the profits for each of the years.

TABLE VIII.7 *Guide Figures Indicating Movements in Profits* as a Percentage of Capital for Large Retailers*

Trade	1965–6	1966–7	1967–8	1968–9 ¹	Percentage change 1967–8 c.f. 1965–6
Department Stores	16·29	12·48	18·12	17·36	11·2
Cooperative Societies	33·69	27·40	18·94	14·68	–43·8
Food	35·99	41·75	37·00	40·34	2·8
Confectioners/Tobacconists/Newsagents	32·35	25·12	25·85	27·94	–20·1
Clothing and Footwear	22·14	17·42	18·87	17·19	–14·8
Household Goods	27·49	11·57	11·90	13·00	–56·7
Miscellaneous	27·46	23·34	25·91	17·86	– 5·6
Weighted average	27·72	22·22	21·92	20·25	–20·9

* The nature of these figures is described in the text.

¹ Based on returns from over 80 per cent of the firms, using 1967–8 as a link.

¹ The figures used, and the methods of arriving at them, are discussed in Appendix E.

TABLE VIII.8 *Guide Figures Indicating Movements in Profits*
as a Percentage of Capital for Wholesalers*

Trade	1965-6	1966-7	1967-8	1968-9 ¹	Percentage change 1967-8 c.f. 1965-6
Traditional Wholesalers	15.1	12.5	12.7	14.1	-15.9
Perishable Food Wholesalers ²	—	—	—	—	—
Industrial Wholesalers	13.5	11.6	10.9	n.a.	-19.3
<i>Traditional Wholesalers</i>					
Groceries, Confectionery and Tobacco ²	19.1	15.5	16.3	18.3	-14.7
Textiles and Footwear	12.2	8.1	7.9	10.7	-35.2
Electrical Goods and Hardware	14.8	14.3	14.7	13.0	-0.7
Other Goods ²	15.3	15.6	15.5	18.5	1.3
<i>Industrial Wholesalers</i>					
Scrap Metal Merchants	—	—	—	—	—
Steel Stockholders	19.6	17.1	13.8	15.5	-29.6
Engineering Distributors and Machine Tool Merchants	19.1	13.7	13.4	12.9	-29.8
Agricultural Machinery and Tractor Dealers	11.1	11.1	11.6	n.a.	4.5
Agricultural Merchants	12.0	9.4	10.2	10.7	-15.0
Builders' Merchants	16.3	16.2	13.0	14.0	-20.2
Woollen Merchants	2.7	2.2	3.2	n.a.	18.5

* The nature of these figures is described in the text.

¹ Based on a smaller number of returns, linked through 1967-8.

² Figures were not calculated for perishable foods, frozen foods or newspapers because the indicator used for capital was unsuitable in those trades.

CHAPTER IX THE HISTORICAL RECORD ON PRODUCTIVITY

The use of our enquiries to measure movements in productivity involves, inevitably, a host of difficulties: the figures presented in this chapter are not ideal, and should not be used for points of fine detail, but we consider that they give a reasonable general picture.

On the output side, we follow the traditional procedure of measuring changes in output for a trade by reference to movements in the 'volume' of goods sold between one year and another—i.e. changes in the value of sales, adjusted by a suitable price-index. We do not attempt to make any allowance for changes in the average quality of the service supplied with the goods.

On the employment side, we collected data of two types which were relevant:

- (1) Figures for numbers employed in various categories on one or two dates in each year, from which we calculated the full-time equivalent of the labour force.
- (2) Figures for the amount spent on the firm's payroll in the year, which could be adjusted for changes in earnings (*plus* national insurance etc.) to give the movement in employment. (The details of the method are described in Appendix E.)

After some discussion and experimentation¹, we decided that the best approach to adopt for this particular problem was the adjusted payroll, for the following main reasons:

- (a) Quite a large proportion of the firms were unable to give us figures for numbers employed, whereas all of them could give us payroll on a consistent basis for all the four years. We did not ask the smaller retailers for any employment figures because we knew they would often be unavailable.
- (b) Even where employment figures were given, the payroll figures were unquestionably more reliable, since they came from accounting records, whereas the figures for the numbers employed at the specified dates were sometimes not recorded, or not recorded in sufficient detail (e.g. as to the length of time worked by part-timers).
- (c) The payroll figures related to the same financial year as the sales figures, which were to be used for deriving the output measure; the employment figures, on the other hand, related to two dates in the year at best, and although these were the same dates in each year, one could not feel confident that the movement in the average number of people employed over the firm's financial year would be adequately reflected in the figures for two isolated dates.
- (d) Although the adjustment for the movement in average earnings might be seriously inaccurate for individual firms, nevertheless it ought not to be too far wrong for a trade as a whole.

¹ We asked a number of firms, for which the two methods gave very different results, whether they could account for the difference. This revealed that the employment figures were frequently inaccurate.

It should be noted that although the payroll method of measuring employment changes does not cover those self-employed in our sample who drew no salary, nevertheless it gives a close indication of movements for the total labour engaged, including these people. The large retailers were all companies, so that the question of their inclusion does not arise, and this was true for many of the smaller retailers also. For the smaller retailers in which the employer did not draw a salary, one can appeal to the fact that the movement in deflated payroll was very small and would not have been significantly changed by including employers on the basis of the assumption that the number of employers remained constant. (The problem of employers and self-employed is of real importance only in shops which are smaller than the ones which we covered.)

One consequence of our method of procedure is also worth noting, which is an advantage for some purposes and a disadvantage for others: it is that our estimate of the movement in employment automatically makes an allowance for changes in the amount of paid over-time (on a basis which reflects over-time payments), whereas a plain numbers figure would make no allowance at all for such changes. Similarly it allows for any tendency to increase or decrease the proportion of highly paid (or lowly paid) employees—i.e. for changes in average grade. We obtained quite a lot of information which is relevant to an assessment of the importance of this type of factor, some of which is set out in Chapter XIV. Our clear impression is that whilst changes of these kinds might be important in individual firms, their quantitative impact on the outcome for our whole sample was small.¹

In effect, therefore, our productivity index reflects the level of sales in each year, adjusted for changes in price, divided by the level of the payroll, adjusted for changes in earnings rates etc.; we have expressed the results in the form of an index for each trade, with 1965–6 as 100.

It may be helpful to some readers to think of the results as an adjusted version of the familiar series for 'sales per £ of payroll'—the adjustments being in proportion to the movements in the prices of goods for the numerator, and in accordance with movements in the price of labour for the denominator. Since the prices of goods normally rise more slowly than the price of labour (even when SET is eliminated from the latter) the ratio in its adjusted form normally rises faster than does a straightforward figure for 'sales per £ of payroll'.²

¹ We calculated the ratio of employment in 1967–8 to that in 1965–6 by both methods for each of the large retailers who supplied us with employment figures, and compared the 'FTE numbers' ratio with the 'adjusted payroll' ratio. For individual firms the deviation was quite large—as was to be expected, since the concepts are not identical, the earnings index could not be expected to be right for each firm taken separately, and the employment figures were sometimes only estimates (and in some cases related to weeks which were unlikely—e.g. because of new branches—to give a representative picture of the movement between the averages for the firm's two fiscal years). The reasons for the deviations were, however, likely to tell in different directions in the various firms, so that one could expect the average movement for all firms within a trade on each of the two bases to be fairly similar, and this was in fact the case for each trade. Averaged over the whole field, the 'FTE numbers' ratio was rather higher, the difference being a bit under one per cent.

We wish to emphasize that we do not regard this exercise as doing more than show, in a rough way, what difference it would have made if we had adopted the FTE numbers approach (though we would then have had to try to get more accurate figures for employment in 1965 from a number of firms, in place of estimates). We decided in favour of the payroll approach without knowing which way it would influence the result, and are firmly of the opinion that it was the correct choice.

² We have in fact given figures for 'payroll as a percentage of sales' in Chapter VII, both including and excluding SET: these figures are the reciprocal of the ones for 'sales per £ of payroll'.

FIGURES FOR RETAILING

The figures which we have prepared for the various kinds of retailing are given in Table IX.1: it is perhaps wise to repeat the warning that the figures should only be used as a broad measure of what has been happening, and that individual figures may contain serious errors.

TABLE IX.1 *Index of Movements in Productivity for Retailers*
(1965-6=100)

Trade	1965-6	1966-7	1967-8	1968-9 ¹
<i>Large Retailers</i>				
Department Stores	100.0	100.3	107.1	107.9
Cooperative Societies	100.0	103.4	107.2	110.6
Food	100.0	101.6	108.3	112.9
Confectioners/Tobacconists/Newsagents	100.0	105.9	113.7	116.3
Clothing and Footwear	100.0	102.7	107.7	109.5
Household Goods	100.0	102.5	110.0	116.6
Miscellaneous	100.0	102.0	104.5	103.8
Weighted average, large retailers	100.0	102.3	107.6	110.3
<i>Smaller Retailers</i>				
Food	100.0	104.9	105.1	
Confectioners/Tobacconists/Newsagents	100.0	101.3	104.4	
Clothing and Footwear	100.0	103.4	109.4	
Household Goods	100.0	103.1	106.6	
Miscellaneous	100.0	99.1	107.4	
Weighted average, smaller retailers	100.0	103.0	106.5	
Combined figure	100.0	102.5	107.3	110.0 ²

¹ Based on returns from over 80 per cent of the firms, using 1967-8 as a link.

² Based on the assumption that the proportionate increase in productivity for smaller retailers between 1967-8 and 1968-9 was the same as that for large retailers.

These productivity movements are based on payroll adjusted for increases in earnings and employers' contributions to National Insurance. Sales are deflated by increases in price. Further details of these adjustments may be found in Appendix E.

Looking at the figures broadly, then, there is no question about the picture which they convey: there has been, since 1965-6, a widespread and progressive advance in productivity. This applied both to large retailers and to smaller retailers, and to each trade for which we have separate figures.¹

¹ To avoid any risk of mis-understanding, it may be wise to re-emphasize that these figures do not represent 'the effects of SET', which are discussed in Chapter XI. The movements in productivity in earlier years are discussed below.

Comparison with Global Estimate

Since the figures in Table IX.1 are the end-product of a hazardous statistical process, it is fortunate that they can be checked against a completely independent calculation. The alternative approach only gives a single series for retailing as a whole, and it is also subject to serious statistical uncertainties, but the complete independence of the data makes the check extremely valuable.

On the output side the alternative approach uses the figures prepared by the Board of Trade for inclusion in the estimates of movements in the gross domestic product for the whole economy; these are based on the index-numbers of retail sales in the various trades which are published each month, adjusted for movements in prices. They follow broadly the same principles as our calculation, and we have made use of the Board of Trade's price factors, but the information on movements in sales is completely independent.

On the labour side, the whole approach is quite different. With the aid of the Department of Employment and Productivity we have endeavoured to arrive at annual figures for the total number of workers engaged in retailing, expressed as full-time-equivalent people, and including the self-employed. The difficulties are formidable, and are discussed in Appendix D, but we hope that the figures which we have produced give a reasonable guide to the *movements* which we want. It must be realised, however, that whilst the output series and the labour statistics are both put forward to represent *national* movements, they are derived from quite separate sources, and the output figures are based on returns from a *sample* of businesses.

The results of this approach are shown in Table IX.2: we have no means of saying whether this set of estimates gives a more or a less reliable picture than Table IX.1, but fortunately the general impression created is very much the same. Knowing the uncertainties involved in both methods, we were both surprised and relieved to be spared the task of trying to reconcile them or to assess their rival 'credibility marks'.

TABLE IX.2 *Output, Numbers Engaged and Productivity
in Retailing, 1965 to 1968*
(Index numbers, 1965=100)

Item	1965	1966	1967	1968
Output ¹	100.0	101.4	102.9	105.3
Numbers engaged ²	100.0	99.0	97.1	94.8
Productivity	100.0	102.5	106.0	111.1
<i>For comparison</i>				
DAE Productivity series ³ (from Table IX.1)	100.0	102.5	107.3	110.0

¹ Board of Trade series for volume of output.

² Full-time-equivalent, including self-employed. See Appendix D.

³ The timing of this series is based on firms' financial years; their average terminal date is close to the end of January.

Comparison with Earlier Periods

Table IX.3 gives a comparison between the annual rates at which productivity was increasing in the various trades between 1965-6 and 1967-8 on the one hand, and the corresponding annual rates for the two inter-Census periods. It must be frankly stated that the latter are subject to considerable uncertainty, and only broad comparisons should be made: it must also be remembered that 1966 was partially subject to SET.

It is fairly clear that the growth of productivity since 1965-6 has been faster than in either of the inter-Census periods; every trade then shows a rise in productivity which is above that in either of these periods, apart from miscellaneous goods—where the statistical difficulties are particularly acute.

TABLE IX.3 *Annual Averages for Movements in Productivity in Various Periods*

(The figures are percentage compound rates of change)

Trade	Period 1965-6 to 1967-8			Census Comparisons	
	Large Retailers	Smaller Retailers ²	Combined Figure ²	1957-61 ¹	1961-66 ¹
Department Stores	3.5	—	3.5	2.9	2.4
Cooperative Societies	3.5	—	3.5	-0.4	1.7
Food	4.1	2.5	3.4	2.4	2.5
Confectioners/ Tobacconists/ Newsagents	6.6	2.2	3.3	2.4	-1.0
Clothing and Footwear	3.8	4.6	4.0	3.3	2.7
Household Goods	4.9	3.3	4.2	1.5	2.7
Miscellaneous ³	2.2	3.6	2.6	(3.3)	(2.9)
Movement in weighted average	3.7	3.2	3.6	2.3	2.3

¹ Using full-time-equivalent figures of persons engaged as a measure of employment.

² This does not cover retailers below the size which we sought to include in our enquiry.

³ Includes variety and general stores; excludes General Mail-Order Houses. (The statistical difficulties are particularly great for this category.)

Census comparisons are necessarily approximate owing to data limitations. Adjustments have been made to the figures in the light of all the available information in order to attain comparability between years as far as is possible.

See Appendix E for further details of methods used to obtain the figures.

FIGURES FOR WHOLESALING

Table IX.4 summarises the movements in productivity for wholesaling derived from our enquiries. The general impression given by the data is again one of a widespread rise in productivity, at rates not widely different from those prevailing in the retail field.

Comparison with Global Approach

As in the case of retailing it is useful to have a check, in the form of a completely independent calculation. Data on output from the Board of Trade and employment from the Department of Employment and Productivity have again been used, therefore, to prepare an independent estimate of productivity movements. Before turning to the results, however, it should be made clear that the statistical difficulties involved in preparing these global estimates are even greater than they are for retailing. Some of the main problems are as follows.

TABLE IX.4 *Index of Movements in Productivity for Wholesalers*
(1965-6=100)

Trade	1965-6	1966-7	1967-8	1968-9 ¹
Traditional Wholesalers	100.0	102.0	106.0	111.1
Perishable Food Wholesalers	100.0	99.4	97.1	115.2
Industrial Wholesalers ²	100.0	101.3	106.3	111.6
<i>Traditional Wholesalers</i>				
Groceries, Confectionery and Tobacco	100.0	104.2	108.2	109.8
Textiles and Footwear	100.0	98.8	99.6	108.1
Electrical Goods and Hardware	100.0	100.6	106.8	113.4
Other Goods	100.0	103.7	109.7	115.6
<i>Industrial Wholesalers</i>				
Scrap Metal Merchants	100.0	107.8	116.8	n.a.
Steel Stockholders	100.0	99.2	99.7	112.2
Engineering Distributors and Machine Tool Merchants	100.0	99.0	104.4	106.0
Agricultural Machinery and Tractor Dealers	100.0	102.6	109.4	n.a.
Agricultural Merchants	100.0	101.8	107.4	109.5
Builders' Merchants	100.0	100.1	107.3	112.0
Woollen Merchants	100.0	98.3	99.4	104.7

¹ Based on a smaller number of firms, linked through 1967-8.

² Unweighted average for trades shown.

Note

The method of preparing this table is described in the text. In deflating payroll we used the index of average weekly earnings for all manual workers, combined with changes in the employers' share of the National Insurance stamp.

First, the labour statistics are subject to the same sort of problems as in retailing (although the problems relating to self-employment and part-time workers are smaller), and in addition there are problems arising out of the reclassification of manufacturers' warehouses as a result of information obtained after the introduction of SET.

Secondly, the Board of Trade series for output are less reliable than in the case of retailing.

Thirdly, the problem of aligning the figures for labour and for goods passing through the wholesale stage is greater in this sector.

TABLE IX.5 *Output, Numbers Engaged and Productivity in Wholesaling, 1965-8*
(Index numbers 1965=100)

	1965	1966	1967	1968
<i>'Non-Industrial' Wholesalers¹</i>				
Output ²	100	102	103	106
Numbers engaged ³	100	99	97	96
Productivity	100	103	106	110
<i>Dealers in Coal, Builders' Materials, and other Industrial Materials.</i>				
Output ²	100	99	99	103
Numbers engaged ³	100	98	96	95
Productivity	100	101	103	109

¹ Minimum List Heading 810 in 1958 classification: includes petroleum products.

² Board of Trade series for volume of output.

³ Full-time-equivalent, including self-employed.

In comparing the figures which have been deduced from our enquiries with the results of the global approach, it should also be emphasised that the enquiries did not cover the whole field of wholesaling, so that it is difficult to make one series act as a check on another. The global figures for non-industrial wholesalers, for instance, include petroleum products which were not covered in our enquiries, and on the industrial side we did not cover coal, and regarded our enquiries simply as a method of investigating the problems which arise in specimen fields.

From the point of view of providing a check, the most valid comparison is between the global figures for non-industrial wholesalers in Table IX.5 and the survey figures for traditional wholesalers in Table IX.4. We were decidedly surprised to find that the figures are so similar.

So far as the industrial wholesalers are concerned, the Board of Trade estimates of changes in output are so uncertain, and our sample covers so narrow a field that we were prepared to find very large differences, and we decided to include the two sets of figures essentially because they are the only ones available. In point of fact, however, they do show much the same general picture, so perhaps each series gains additional credibility from the comparison.

In view of the surprising degree of agreement between the two approaches, we were again spared the task of having to reconcile the two sets of figures.

Comparison with Earlier Periods

Comparison with information from the Censuses is of little value, because the only movement which can be calculated has to cover the whole period from 1950 to 1965, and we have already noted various reasons why this is unsatisfactory. For what it is worth, however, we attempted to make a comparison in

the field of traditional wholesalers, where we were able to make some sort of comparison for grocery, tobacco, textiles, footwear, and electrical goods plus hardware. This showed a rise over the fifteen years of some 23 per cent, equivalent to 1.4 per cent per year, which represents an advance at about half the pace shown in Table IX.4 for traditional wholesalers.

The data which we obtained from Trade Associations (summarised in Appendix C) showed, in general, a slower rate of advance in productivity for pre-SET periods than we found for the movement since 1965-6. For groceries, however, there was a rapid rate of advance (5.7 per cent a year) for the period 1960-5, during which cash-and-carry was being progressively introduced, and the textile group showed a rise of 3.6 per cent a year between 1962 and 1965.

PART III

THE EFFECTS OF SET

CHAPTER X PRELIMINARY ANALYSIS

As a prelude to Part III of the Report, we need a rather more extended analysis of the issues than was given in the very brief treatment in Appendix A (which was reproduced from the June 1966 issue of the London and Cambridge Economic Bulletin). As the position differs markedly between retailing and wholesaling in several important respects, we treat these two trades in separate sections.

RETAILING

The Passing on of Indirect Taxes

In analyses of the effects of indirect taxes, it is normal to take as a first approximation the assumption that the tax will be passed on to the buyer, unless there are special reasons to the contrary. As SET is a somewhat unusual form of indirect tax, it is helpful to start by examining how far this presumption applies to it, and subject to what limitations. We naturally centre the discussion on retailing, but we are basically comparing a situation in which SET applies not only to retailing but also to the other SET trades as well, with an alternative position in which an equivalent revenue is raised by some other form of indirect taxation of a general kind (e.g. a value-added tax).

The presumption that, at least in the long run, SET will be passed on by the retailer in one form or another rests on two main arguments:

- (1) The effect of having SET, rather than the other tax, on the size of the market open to retailers is very small indeed.
- (2) SET applies to virtually all traders supplying the retail market, so that all would suffer from the increase in costs which SET produces. Hence each trader believes that he can raise his margin without suffering the loss of sales which he would otherwise have expected, because his rivals will be seeking higher prices also.

The fact that SET is not a tax on the goods themselves but on the labour employed in the retail establishments, does not in itself upset the general presumption about the passing on of at least part of the cost: the same is true of many other additions to costs, whether they be taxes or something else—e.g. increased employers' contributions to National Insurance, higher wages, higher local rates, dearer petrol or dearer electricity. The most that can be said in the case of SET is that the tax is rather smaller in relation to sales for those employers who make efficient use of labour, and so have a smaller number of employees

per £100 of sales; insofar as these traders may be the pace-setters in the fixing of margins, the margin may rise by the equivalent of *their* increase in costs, rather than the average. The same point arises, however, when it is a case of raising wages, and the efficient traders may take the opportunity of improving their profitability by raising prices in line with a more typical cost-increase than their own.

Nevertheless, the special nature of SET may slow down the passing on process, especially where prices—or more strictly, margins—are sticky owing to the influence of a long standing convention. In particular, it is not obvious with SET what the addition to price should be—as it is, for example, in the case of retail sales taxes levied in the United States of America—and in the absence of some obvious addition to make, each enterprise is reluctant to be the first to act. The fact that the initial level of SET was only equivalent to a rise of 1 per cent on selling prices may also have tended to lead each trader to try to gain a competitive advantage by not being the first to increase his prices: since this would meanwhile be reducing his profits there was a strong incentive to make a switch to offering a cheaper form of service with the same margin—which would be less ‘obvious’ to the customer, and give more scope for small adjustments. Under such circumstances it is not at all easy to distinguish an improvement in efficiency from a deterioration in service.

It is also possible that the profit squeeze will, in the longer run, reduce the amount of selling capacity in the retailing industry, and so lower the effective level of unit costs: we discuss this later in this chapter. What does seem safe to assert is the general presumption that, at least in the long run, an indirect tax such as SET will not be left to come out of the profits of the retailer—any more than the cigarette duty comes out of the profits of Imperial Tobacco or Gallaher.

Cash and Percentage Margins

In the case of retailers we tend to think of the *retail (gross) margin* as being the equivalent of the ‘price’ which the retailer charges for his service in distributing his wares, and it is important to remember that in most trades (but not all) this is thought of in percentage terms, rather than as a cash margin of so much per article sold. There are important exceptions—notably for cigarettes, where the technique of using cash margins has important implications when the rate of duty is changed, especially as the increase is usually large in comparison with the retail margin; but for most trades the number of different items is so large—especially when quality variations are included—that margins have to be thought of basically as a percentage of the selling price.

The fact that margins are so largely thought of in percentage terms probably tended to increase their ‘stickiness’ in the face of SET because it means that ‘margins’, in the operationally meaningful sense, have been relatively stable over the years. Admittedly Chapter VI showed a slow upward trend in the average percentage margin realised in most trades, but often a conventional percentage mark-up has played a key role as the trader’s yardstick: departures from the traditional figure have been regarded as a major undertaking, on which each retailer would be very reluctant to embark without ensuring that simultaneous action was being taken by his rivals. The progressive elimination of resale price maintenance has weakened these tendencies, especially in such trades as groceries, but the old ideas still have an important influence.

If, by way of contrast, margins had been thought of in cash terms per article sold, then upward revisions in them would have been extremely frequent in post-war years, and 'stickiness' might well have been less.

In the case of SET, the tax does not in general apply to the production of the goods which the retailer is handling, so that their price does not automatically rise when SET is imposed or raised: this is in contrast to the position when (for example) wage-rates are raised in retailing because such an event usually implies a rise in manufacturers' wage-rates at about the same time. Consequently, retention of the old percentage margin after the imposition of SET did not automatically raise the cash margin for the retailer, and so there arose a 'need' for a higher percentage margin or a worsening of service if the old level of profits were to be maintained—and a strong economic pressure to increase efficiency if, for some reason, neither of these could be secured. This is the important economic difference between the raising of the cost of labour through a selective force, which applies to distribution but not to production, and a general raising of labour costs, such as would emerge from a general payroll tax: its importance depends greatly on the 'stickiness' of percentage margins, or some other force restraining their increase.

The Quality of Service, Self-Service Etc.

Inevitably, a great deal of the discussion about distribution keeps coming back to the question of service. A few general points may be of some help, though this is a matter on which many people will have different value judgments.

In the first place, it is important to remember that different types of service are frequently on offer at the same time from different types of shop—and the removal of resale price maintenance has tended to increase the amount of this variety. A 'superior' service may take a great many forms—e.g. prompt attention from a large staff of well trained assistants, or a wide selection of different models from which to choose, or free delivery, or free credit etc., or simply a convenient location of the shop ('round the corner'). Where the goods sold are of much the same quality and price, the percentage margin is liable to be higher in the shop offering better service, but this tendency may be counteracted if that shop sells expensive goods on which a given percentage yields a high cash margin.

A profit squeeze on retailers (such as would be caused by SET if margins are 'sticky') produces an incentive to reduce costs, even if this means lowering the standard of service—a change which is more readily adopted by each retailer when he knows that rivals are under the same pressure. This cost-saving will not be confined to attempts to secure economy of labour, but the fact that the squeeze was produced through labour becoming more expensive may tend to concentrate efforts disproportionately in that direction, through a sort of 'shock' effect; moreover, even where some other motive may be important—e.g. a desire to save bank charges by refusing to give credit—there will commonly also be some reduction in the amount of labour employed per object sold. Perhaps the commonest way of reducing the quality of service is to have fewer assistants in relation to the expected volume of sales, so that customers more frequently have to wait to get attention, and receive less of it when their turn comes. It is a legitimate criticism of the conventional method for measuring the output of the retailing industry (by reference to the volume of goods sold) that it takes no heed of such a deterioration in service, and so exaggerates the rise in output per head, if the average standard of service does in fact deteriorate.

One must, however, be careful about saying that an apparent rise in productivity induced by making labour expensive will always be spurious. Perhaps the most important changes which have led to economy of labour in relation to sales have taken the form of a basic change in the method of selling adopted by the retailer: either he has gone over to self-selection (where the customer chooses the goods, but pays at the counter in question) or he has gone right over to self-service (where the customer pays for all his goods at a single exit point). Such a system certainly raises the volume of goods sold per assistant, but it should not be considered 'inferior' to an average type of counter-service: even when prices are known to be the same in the self-service store, many customers deliberately choose this way of making their purchases. So long as counter-service remains available for those who want it, it seems perfectly legitimate to measure the output of retailing by reference to the volume of goods sold, even though an increasing proportion of them has been bought on a self-service basis: indeed, one might even argue that where self-service was not previously available for some types of goods, the introduction of this additional element of choice *improves* the position for the customer.

Finally, it may be useful to close this section by emphasizing that the movement in the direction of self-service had started before SET was introduced, and would doubtless have continued anyhow: the substance of our discussions with traders involved was that SET had *accelerated* the process of conversion, not originated it. The 'shock' effect of a measure which made labour more expensive was probably important in hastening the process of making changes which were known to be profitable even with the old cost of labour: subsequent increases in SET are less likely to produce similar 'shock' effects—but of course retailers have gained experience from the earlier conversions.

Changes in Types of Labour

Since SET is not charged as a percentage on the payroll of the establishments concerned, it could be expected to produce some incentive towards a greater employment of those categories of worker for whom the cost of SET is small in relation to the wage, and away from those types for whom SET adds a large percentage to the cost to the employer. This was particularly important in the first year of SET, when the same amount had to be paid for a part-timer as for a full-timer, so long as the retailer had to stamp the card at all. Apart from that, however, the 'favoured' classes are people working less than 8 hours in the week;¹ people whose card has been stamped by another employer; and skilled workers (as opposed to unskilled in the same age- and sex-category). On the whole, there is also an incentive to employ women rather than men, and girls rather than boys, since the difference of sex leads to a halving of the liability of SET.

We did not attempt to assess the quantitative importance of the temporary penalty on part-timers during the first year.² The importance of the more

¹ Since November 1969 the 8-hour qualification has been replaced by an earnings threshold of £4 per week.

² The Economic Development Committee for the Distributive Trades carried out an investigation on the movements between 30th June 1966 and 30th October 1966, which showed that there had been an increase in the number of full-timers employed by 1.5 per cent and a decrease in the number of part-timers by 3.2 per cent, but that within the part-time field the numbers working less than 8 hours per week had increased by 2.2 per cent. Given the very strong incentives to change the composition of the labour force, these figures seem to reflect largely the great strength of the forces which lead retailers to employ part-timers, which we discuss from another angle in Chapter XIV.

enduring factors is discussed in Chapter XIV, whilst Chapter XVII deals with the favoured position of self-employed workers, partners and others who are not liable to SET; but it may be as well to emphasise here that most of our informants were much concerned with the difficulties of meeting their labour requirements in *any* form, so that the composition of their labour force cannot be regarded as necessarily conforming to their preferred pattern.

Replacement of Labour by Capital

Since SET does not apply to the production of machinery, its effect is inevitably to raise the cost of doing things by hand relatively to the use of a machine—and generally to encourage the use of *more* labour-saving machinery in processes where machinery is already used.

Although this principle is clearly valid, discussion with retailers revealed very few cases where it had become effective: where an informant gave an actual example, it generally emerged that the change would have been desirable even without SET (e.g. the introduction of a computer)—but the ‘shock’ effect of introducing SET may have accelerated something which might otherwise not have been done for a considerable time.

Since SET applies to building as well as to the distributive trades, there is much less incentive of this kind to spend capital on building work in order to save labour (e.g. by improving layout). Once again, however, the ‘shock’ effect of SET may well have stimulated the search for changes ‘which would have paid anyhow’, and the rise in the cost of the building would not be as great proportionately as the rise in the cost of labour.

Number of Shops

It has been suggested that SET might produce a short-term profit squeeze on retailers which would force some of the less efficient ones to go out of business, and discourage the opening of additional shops; it is argued that this would lead to a rise in productivity, because the amount of business to be done would not be reduced by the fact that the number of shops would be smaller than it would have been in the absence of SET, and the number of assistants per shop would not be correspondingly increased. This would imply that the assistants would be working faster and/or more continuously (the latter development being facilitated if more customers tended to come in off-peak periods to avoid delays), or else that they would be giving less attention to each customer. The saving in wages per £ of sales produced in this way would enable the proprietor to pay SET without securing an increase in his gross margin (or with an increase which was less than the cost of SET) and still receive a normal profit.

The likelihood of SET having a speedy effect on the number of shops is weakened by the fact that some of the businesses which might superficially seem most likely to be closed are run by self-employed people who pay no SET, and employ few if any assistants on whom the tax is payable. Apart from this, however, any attempt to test the proposition directly comes up against a formidable collection of practical difficulties, many of which would apply even if all the data which logically exist could be collected. Thus:

(a) In its nature, this process is unlikely to operate *quickly*: it is most improbable that the full results would have shown themselves even now, and little effect would have been produced by 1968.

(b) If an investigation is done after the tax has been running for several years, the problem of allowing for the influence of 'other factors' becomes particularly acute—e.g. geographical shifts in demand, increased national income, changing tastes etc. Even if one could arrive at 'the historical record', it would be very hard to pass to 'the effects of SET'.

(c) It would clearly be a waste of time to examine a proposition which treats shops as if they were of a single standard size, and implies that one simply needs to count them in order to judge the result (after allowing for the other factors). Thus the Censuses of 1961 and 1966 show that the number of shops fell from 542,301 to 504,412 (on a roughly comparable basis), but this certainly did not imply a fall in the 'capacity' of the retailing industry, which obviously rose. The proposition would have to be restated in terms of 'capacity' rather than number of shops in order to be worth direct examination, and the practical problem of measuring 'capacity' seems insuperable. Even the historical record would be, at best, a crude approximation to what was wanted.

(d) There are also very serious data problems unless a comprehensive Census is taken, since one could not rely on inquiries to retailers who have continued in business: the information which one needs would have to be obtained from those who had closed down.

In spite of these difficulties, we decided to explore various indirect ways of getting a clue to the assessment of what has been happening to 'capacity' and why, since this is clearly important. In effect, we examined the state of the property market for shops, in the hope of finding out how the supply (on various measures) had moved, and whether there was a tendency for the proportion of vacant premises to increase, or for the amount of new building 'starts' to be depressed. The results of this investigation are set out in Chapter XIV.

We also tried to make deductions from the cases where we were informed that firms had closed 'marginal' branches which did not pay. This information is not easy to use, however, because the closure was often part of a process of replacing several small shops by one large self-service one, with equal or greater selling capacity: this is a process which saves labour for a given volume of trade, but is not really related to the thesis being examined. Even where our informant's selling capacity was reduced, the old building was usually sold or let to another retailer, and it is not at all clear what effect this had on total selling capacity.

Attempts to Increase Trade

It was clear that in a number of cases the main reaction of a particular retailer to the introduction of SET had been to try to expand his own share of the trade, as a means of spreading his expenses. Where this was done by an aggressive price policy (if only by not increasing his gross margin) it simply represents one part of the profit squeeze which we have been discussing above, and it may lead other retailers to close. On the other hand, it could also be attempted by increasing advertising, improved shop-fronts etc., or by offering a *better* service for a margin raised by the normal proportion.

Measures of this second kind may increase the pressure on other retailers to close, and so result in a genuine reduction of the industry's total outgoings: but insofar as this does not happen, efforts by individual retailers to 'pull more of the blanket to their own side' by additional expenditure are liable to be self-defeating, since the total volume of retail sales is unlikely to be increased: in effect, they will be counteracting some of the cost-saving tendencies discussed above.

In considering the position of wholesalers, one point needs to be made at the outset, although it has relatively little to do with SET: the growing proportion of retail trade done by multiples and other large organisations, which are well placed to buy a substantial proportion of their supplies direct from manufacturers, has for some years been having a depressing effect on the growth of the wholesale trade, as compared with that in retailing. SET may have accentuated this trend somewhat, but in was in any case to be expected that the figures for sales would show less expansion from one year to the next for wholesaling than in the case of retailing.

Passing on of SET

The biggest difference between wholesaling and retailing, so far as the analysis of SET effects is concerned, lies in the very much weaker presumption that it will be possible for the wholesalers to pass on the burden of SET. There are two main reasons for saying this, which may be linked with the two reasons given in the first section for the presumption that retailers will, sooner or later, pass on the burden in one form or another:

- (a) Firstly, it is not true at the wholesale level that SET applies to virtually all firms who are offering supplies to retailers: in many trades, an important part of the supplies comes direct from manufacturers, who have a sufficient distributive organisation to supply at least the larger retailers, and who effectively escape paying SET. Competition between wholesalers, and manufacturers' distributive organisations is clearly made unequal by SET, and quite often the wholesaler is left with the choice of continuing to supply the retailer at the old margin, or withdrawing from that part of the market.
- (b) Insofar as less is paid in SET when goods go direct from a manufacturer to a multiple than is payable when goods go through a wholesaler to a smaller retailer, there is a tendency for trade through the first channel to grow relatively to the second (over and above the tendency which was noted above as existing anyhow). Hence the size of the market open to wholesalers in their 'natural' field (supplying smaller retailers) is artificially contracted, and the force of competition between wholesalers in this market is somewhat intensified.

These points may be reinforced by a number of other considerations, although to some extent they are alternative ways of looking at the same things. Thus there are a number of powerful forces which tend to make the wholesaler's gross margin a great deal more 'sticky' than the retailer's, which spring from the fact that they are selling to businessmen rather than to the general public: thus the retailers to whom they are selling are better informed and more concerned to buy keenly (especially when SET has been imposed on them also, and made them extremely cost-conscious), and they can threaten to buy direct from the manufacturer if the wholesaler tries to charge more than a traditional margin.

From another point of view, there are a large number of articles on which it is true to say that the standard percentage margin available to the wholesaler is effectively fixed by the manufacturer—although there may be scope for variations in special circumstances; moreover this margin has usually not been in-

¹ Much of what is said in this section applies, *mutatis mutandis*, also to industrial wholesaling, but the special problems of that sector are left to Chapters XVIII and XIX.

creased, or the increase has been considerably less than would cover SET. It is true that prices can effectively be raised to some types of customer by giving lower trade discounts on small orders, but in some trades competition with manufacturers is a real threat over nearly all the field. (This point is discussed in the next section.)

Insofar as the wholesaler cannot pass on the burden of SET in the form of higher prices, there is some scope for him to do so in the form of worse service (less frequent calls, slower deliveries, less credit etc.). To some extent one can expect this process to lead to a degree of rationalisation, under which retailers on whom two or more wholesalers previously called find that they receive visits from only one, with whom larger orders are placed. This saves costs, albeit at some inconvenience to the retailer: there have also been movements, which started before the introduction of SET, towards the system of rationalisation known as 'voluntary group wholesaling', and SET may well have accelerated this.

A more drastic form of rationalisation has also been accelerated in recent years, especially in the grocery field, by the spread of cash-and-carry self-service wholesaling. The gross margin on this type of wholesaling is lower—typically some five per cent for wholesale grocers, rather than seven per cent—but it means that the retailer incurs some additional costs, as well as having to pay cash. By improving the position of the smaller retailer, the process has helped some of them to stay in business in competition with large grocers, and so preserved trade for the wholesalers who supply them.

Varying Incidence of Anomalies

The fact that manufacturers selling direct virtually escape SET on their distributive activities naturally produces very different effects on different parts of the wholesalers' business. It applies most directly to their sales to multiples and other large organisations, which takes the form of a small number of large contracts. On such business, the wholesaler's percentage margin is generally small, and any attempt to increase it to cover SET would be likely to mean that the buyer would go direct to the manufacturer. In consequence, wholesalers are likely to find it unprofitable to spend so much money on trying to secure this type of business.

With medium-sized purchases it is fairly common for the manufacturer to supply part of a retailer's purchases of the goods, and for the latter to obtain the rest of his supplies from a wholesaler at a higher price—in return for which the retailer has the benefit of a more straightforward method of selecting between the products of different manufacturers, and also a quicker and more convenient service. It is not a question of straight price-competition between wholesaler and manufacturer, but if the wholesaler raises his price to cover SET (or reduces the quality of his service) there would be a clear risk of his losing part of the trade to manufacturers, because the balance of advantage to the retailer would change; he might not lose the whole of his trade with any one retailer, but there would be a tendency for more of the retailer's purchases to go on his direct bulk order, and for less to be met at higher cost from the wholesaler. As noted above, the retailer, with his own SET to pay, is particularly likely to react to any attempt by the wholesaler to charge more than the 'proper' price, in relation to the price 'recommended' by the manufacturer, or—where no such price is recommended—in relation to the price at which the manufacturer is known to be willing to supply retailers.

In consequence, it is in dealing with the smaller buyers that the wholesalers are likely to try to recover the cost of SET, by raising their effective margin and/or giving a cheaper type of service: these buyers often cannot effectively turn to direct purchase, and often need the credit which they have traditionally received from the wholesalers. The number of devices open here is quite large—e.g. smaller discounts for cash, refusal of very small orders, less frequent calls, and—more constructively—the organisation of voluntary group wholesaling or a switch to cash-and-carry. Anything which raises the effective cost of the goods to the smaller retailer runs the risk, of course, of reducing the scope of that trade, especially when the channel direct from manufacturer to multiple retailer is less heavily taxed: to some extent, however, the exemption of self-employed people and family workers not drawing a wage helps the small retailer, and so may act as a rough counter-balance—but this will be very small for the slightly bigger retailer with perhaps five to ten employees.

There is another 'dimension' in which the wholesaler can react to the competition from manufacturers who sell direct to the retailer, and that is by concentrating more of his selling energies on goods made by small manufacturers or foreign firms, who cannot effectively supply retailers direct, so that the wholesaler can raise his margin without being directly undercut. This means, however, that such goods become more expensive, both at the wholesale level and at retail, and the public may reduce their purchases of them.

One cannot of course say from a *a priori* analysis how far each of the various possible results would emerge from the imposition of SET on wholesalers' but not on manufacturers' selling organisations: that is one of the things which our enquiry was designed to ascertain, though the answers (given in Chapter XVI) are bound to be a bit impressionistic. One general point does, however, need to be made: in the short run one would expect this distortion of the competitive process to show up more in the form of lower profits for wholesalers, and less in the form of diverting trade to manufacturers, than will emerge later. It takes some years for low profits and trading difficulties to produce their full effects through the discouragement of new entry into wholesaling and the incentive to existing wholesalers to withdraw, merge or change to some other activity.

Number of Establishments

It was to be expected that the number of wholesale establishments (or, more strictly, their 'capacity') would be affected more rapidly than the number of retail shops, partly because the squeeze on wholesalers is likely to be greater, and partly because the trade done by a wholesaler is less dependent on a customer entering the building. Firms with a number of warehouses may be able to close some of them, and still use the remaining ones to carry out all the business which has been obtained through the post or by calling on customers (either physically or by telephone). Our enquiries showed that there has been some tendency for firms to close one or more warehouses in this way as part of the economy campaign induced by the profit squeeze, despite the fact that the consequence was liable to be slower delivery and less convenient access for customers to the firm; most of the closures seem, however, to have been associated with mergers, where some space became redundant.

These mergers seem to have been more powerful in producing economies than a simple reduction in the number of warehouses operated by each firm: they clearly open up possibilities for economies in combining the selling and

transport organisations, as well as the warehouse itself. We tried to assess what had been happening to the number of firms from enquiries to Trade Associations about any change in the frequency of mergers or closures, as well as by using information obtained in the course of our general enquiry. The general view seemed to be that these processes of contraction of facilities had indeed accelerated, as one might expect in a period of profit squeeze.

Statistical Problems of Cash-and-Carry

In considering the 'productivity' of the wholesaling industry—and more particularly its grocery section—it is doubtful whether one should use 'the volume of goods sold' as the output indicator, without regard to the increased proportion sold on cash-and-carry. It is true that the system as such offers advantages to retailers (or caterers) in certain circumstances—e.g. if there is a nearby warehouse and the customer wants supplies quickly, or if he wants to evade income tax by falsifying his books (a factor mentioned—perhaps in jest—by a number of wholesalers); moreover, the extra costs to the customer are minimised by his choosing slack periods in his business for a visit to the warehouse, and his office work is significantly reduced. But the popularity of the system seems to rest largely on the lower price paid by the retailer, rather than on the quality of the service, and in measuring the wholesalers' volume of output it would be logical to allow something for this factor.

If, however, one considers the complete process of distribution, covering both wholesaling and retailing, any deterioration in the quality of the service rendered by the wholesaler can be ignored, and the output of the two trades together can be measured by the volume of goods sold to the public; this is what we do in one of our calculations. From another point of view, the worse service rendered by the wholesaler should be regarded as reducing his output, but this would imply a correspondingly worse *input* to the retailer, for which the latter should get credit in any productivity assessment.

Types of Labour, Mechanisation Etc.

The position on these is essentially similar to that described in the retailing section, except that part-time labour (and changes therein) is less important in wholesaling, whilst there seems to be rather more scope for increased mechanisation—e.g. in warehouses, or in transport.

CHAPTER XI THE EFFECTS OF SET ON PRODUCTIVITY IN RETAILING

It is convenient to start our study of the effects of SET by taking its effect on productivity, rather than on the financial side of distribution, for two reasons:

- (a) The data for pre-SET years is much better in this part of the field than it is on the financial side. Consequently, it is possible to show the logical arguments underlying our approach by reference to what we actually did, rather than to what we would have liked to do if the data had been available: in the other cases, the logic of the basic method is somewhat hidden by descriptions of the makeshift devices which we were forced to adopt for lack of proper basic data.
- (b) The subject of productivity is clearly a very important one, and an appreciation of the effects of SET on productivity is a help for understanding the developments in the financial field.

METHOD OF DISENTANGLEMENT

The broad philosophy of the methods for disentangling the effects of SET has already been given in Chapter IV, and a fuller and more technical account of what was done for each particular item 'disentangled' is given in Appendix F. Nevertheless it seems useful to start with a summary of what we did, and why.

We may start by stating the basic assumption that the volume of goods sold is determined by the general working of the economy, rather than by anything that happens in the retail sector as such, whether or not SET is operating. In particular, it is assumed that the volume of goods to be distributed is not affected (or affected to a negligible extent) by the fact that SET is being used rather than some other form of taxation.

In broad strategy the disentanglement process consists in first using the aggregative statistics for output and employment in the pre-SET years to assess, in quantitative terms, the influence of the various factors which determined the number of people in retailing (expressed in terms of full-time-equivalents) in each year, and so the level of productivity; we then apply those rules to the external data for post-SET years to find what the level of employment and productivity would have been then in the absence of SET, and compare the answer with the observed result. Since the results of our own enquiry were shown in Chapter IX to give very similar movements in productivity to those deduced from aggregative statistics for the whole retailing industry, we simplify the discussion by using only the latter to measure 'the observed result', apart from a final review in the last section.

One can consider the development of a set of explanatory rules for the movement in productivity either by starting with a consideration of what seems economically plausible, or by treating it as a matter of examining the actual statistics and trying to think what factors would produce that kind of movement. In practice we employed a mixture of the two methods, but with extensive use of the economic approach—without which one would not know what factors to introduce as possible explanatory variables. This description cannot, therefore,

exactly constitute an account of 'how it was done', following the order of events, but it comes fairly near to doing so.

Upward Trend in Productivity and Influence of the Labour Market

First of all, there was a reasonable *a priori* expectation that productivity would show an upward trend over any period of a decade or more, reflecting the introduction of improved methods, sometimes involving additional capital per worker. Figure XI.1 shows that in fact the output per worker between 1954 and 1965 did show a considerable upward trend, which averaged about 2.4 per cent a year. If no further analysis were possible, this trend line would constitute a fairly good explanation of the movements in productivity—but, as it turned out, the further analysis proved to be important.

The figure also shows that the deviations from the trend line are mostly upwards in years of good trade, and downwards in recessions. One possible way of accounting for this result—by reference to the varying state of the labour market—seemed very plausible in the light of work previously done in the Department of Applied Economics. This had analysed the figures for different towns given in the 1961 Census of Distribution, and had shown very clearly that sales per person engaged were much higher in towns in which the labour market is 'tight' than in towns where labour is more abundant.¹

By analogy, one might well expect that the deviations from trend in the productivity figures for the country as a whole could be explained, at least in part, by variations in the state of the labour market between one year and another. The 'economic' reason for expecting this would run roughly as follows: when the labour market is tight, retailers may fail to recruit as many workers as they would like to have, and productivity will in consequence rise above trend, (although the quality of the service may suffer). In a recession, on the other hand, retailers do not want to recruit so many employees, and will be better able to recruit the number that they do want, because the labour market is easier. Both these factors tend to make productivity fall below its trend value, though the quality of service may improve.

The second stage of the econometric approach consisted, therefore, in introducing a figure for each year to represent the general state of the labour market: we actually used the number of unfilled vacancies, expressed as a percentage of the labour force, for all industries taken together. Calculations were then made to see how good an explanation of the deviations of productivity from trend was given by an assumption that productivity would rise above trend by a certain amount for every unit by which the percentage of vacancies rose above its average value (with a corresponding assumption on the other side for recessions).

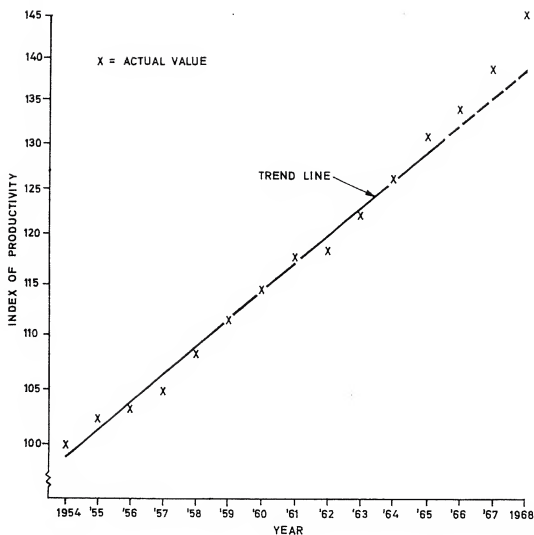
The introduction of a labour market variable in this way did explain quite a large part of the deviations in the productivity figures from the trend value, as can be seen from Figure XI.2. It emerged that the best explanation was obtained by assuming that in years when the vacancy percentage was 1 unit above its mean (i.e. 2.3 per cent instead of 1.3 per cent—a big change) productivity would be above trend by 1.79 per cent²—and pro rata for larger or smaller differences.

Figure XI.2 also shows however that this explanatory factor still left some unexplained deviations of a fairly systematic kind, for which one could hope to

¹ See DAE Occasional Paper No. 8—*Productivity in Distribution* by K. D. George—especially Table V.3 on page 63.

² This does not mean that the whole result was obtained through the tightness of the labour market: such years usually had high sales, the importance of which is discussed below.

FIGURE XI.1
Trend of Productivity in Retailing
 (1954=100)



The object of this diagram is to show how far the actual figures for productivity from 1954 to 1965 fit with a line showing an upward trend of 2.4 per cent per annum. The observations have therefore been plotted on a log scale.

The figures for 1966 to 1968 were *not* used in fitting the trend, but are shown here for convenience.

find a statistical explanation. In particular, the formula did not predict a sufficiently high figure for productivity in the *first* year of a recovery, when the percentage of vacancies is still at a rather moderate level; similarly the predictions were insufficiently pessimistic for the first year of a recession. The formula then leads one to expect a *further* move away from trend in the second year, either of boom or recession, when the vacancies typically showed a more extreme situation, and on the whole the observed figures show that this further movement does not happen.

A pattern of discrepancies of the above kind suggested that we should start again on the analysis and include in the 'explanation' something to reflect the fact that changes take time—which naturally did not feature in our previous investigations based on a comparison between towns, in which the labour markets show much the same relative position year after year. In approaching this part of the problem it is easiest to think in terms of the number of people engaged in distributing the goods, rather than their productivity, since the physical adjustments apply to the people: this means, of course, that we are trying to explain why the numbers engaged are higher or lower in any year than would be 'required' if productivity were at its trend value—and the upward deviations now come in the recession years.

A More Comprehensive Explanation

For technical reasons the econometric approach seeks to explain the *change* in the numbers engaged *from one year to the next*, rather than the number itself, and it seemed logical to explain this by reference to the following factors:

(a) *The initial deficiency (or excess)*. In the first of the two years, the actual numbers engaged in retailing *might* be exactly at the level which would be 'required', on the basis of productivity being at its trend value. If so, this factor is zero. If, however, the number was below the 'required' figure, then this 'initial deficiency' is a factor making for an increase in numbers during the year:¹ the bigger the initial deficiency, the greater the recruitment effort—and conversely for an initial excess.

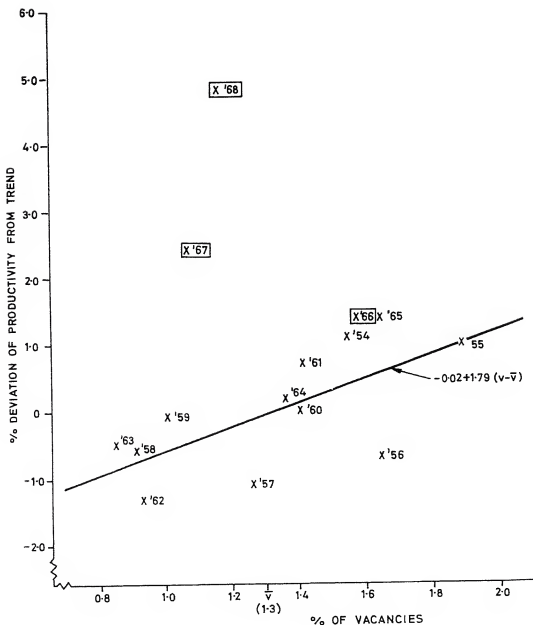
(b) *Abnormally great (or small) growth of requirements*. The growth in the volume of sales between one year and the next raises labour requirements, but the upward trend in productivity works the other way. On average, the two things together led to an increase in requirements during 1954 to 1965 of between $\frac{1}{2}$ per cent and 1 per cent a year, on the basis of the trend values for productivity. Clearly, the more the volume of sales rose between any one year and the next, the higher would be the growth in requirements and the greater the recruitment effort; so we included the excess of the actual rise in sales volume over its average size as an additional explanatory factor.

(c) *The difficulty of recruitment*. The above two factors have dealt with the forces explaining the recruitment effort, but the extent to which it is reflected in an actual recruitment is influenced by the state of the labour market. Hence the inclusion of the 'abnormal vacancies' figure on the same basis as before, which serves as a negative factor—the higher the vacancies in the general labour market, the less able are the distributors to recruit the labour they want.

The above explanation of the reasons why we expected that these factors would explain the change in the numbers at work in the various years has been

¹ It is thus defined as 'required' employment (equal to actual output divided by trend productivity) minus actual employment, expressed as a percentage of required employment.

FIGURE XI.2
*Deviations in Productivity in Retailing from Trend
in Relation to General Vacancy Percentage*



The object of this diagram is to show how far the deviations of productivity from trend in the years 1954 to 1965 can be 'explained' by deviations of the general vacancy percentage from its mean for those years.

The markings for 1966, 1967 and 1968 were not used in fitting the line, but are included because their distance from the line provides one means of showing how far abnormal factors were raising productivity in those years.

deliberately put in a somewhat over-simplified form: in particular, it speaks of the 'recruitment effort' as if there were a single employer who was trying to build up the labour force. It is not difficult, however, to express the same ideas in a way which reflects the fact that there are a multitude of employers, and indeed the argument can be made more persuasive on that basis. One factor which in any case has to be remembered is that there is always a considerable wastage from the labour force, which is naturally big in an industry which relies so largely on female employees: consequently, it is reasonable to talk of a 'recruitment effort', even in years when there is no *net* increase in the number at work.

The Econometric Equation

The econometric process described in Appendix F shows how we arrived at the following equation as a means of 'predicting' the change in employment¹ in a year in the light of the above factors, by choosing the coefficients in such a way as to give the best fit between the 'predicted' and the 'actual' figures.

$$\Delta E = 0.786 + 0.793 (\Delta O - \bar{\Delta O}) + 1.246 D - 2.010 (V - \bar{V}),$$

where ΔE = percentage change in employment between the two years in question.

$\Delta O - \bar{\Delta O}$ = difference between the percentage change in output between the two years in question and the average of the eleven such percentage changes in the period 1954 to 1965.

D = deficiency in employment in the first of the two years in question, expressed as a percentage.

$V - \bar{V}$ = difference between the percentage of vacancies in the second of the two years and the average percentage for the eleven years 1955 to 1965.

The economic interpretation of the terms on the right-hand side of this equation corresponds with the analysis given above. More specifically, the percentage rise in employment between (say) 1954 and 1955 is 'expected' to be made up of the following terms:

- (i) A constant term, which reflects mainly the combined effect of the 'normal' (or average) growth in output, *less* the normal growth in productivity, and is *always* 0.786.
- (ii) A term to reflect the fact that the percentage growth of output between 1954 and 1955 was 4.6 per cent, against an average of 3.1 per cent. The excess of 1.5 percentage points is multiplied by 0.793 (the 'regression coefficient') to give a contribution of 1.19.
- (iii) A term to reflect the fact that there was a deficiency of labour in 1954 of 1.09 per cent below 'requirements': this is multiplied by 1.246 to give a positive contribution of 1.36.
- (iv) A (negative) term to reflect the difficulty of recruiting labour in 1955 because the percentage of vacancies (1.89 per cent) was 0.59 percentage points above the average: this is multiplied by 2.010 to give -1.19.

The sum of these 4 items gives a predicted change of 2.15 per cent, whilst the actual change was 2.20 per cent, so that there was an error (or 'unexplained' item) of 0.05 per cent for that year.

The contributions of each item to the prediction and the comparison with the actual outcome are shown for each of the eleven years in Appendix F (Table F.5).

¹ For simplicity, we shall use the term 'employment' in the rest of the chapter to stand for 'the full-time-equivalent of the whole-timers plus part-timers at work in retailing, including the self-employed, taken as an average for the year'.

This shows that each of the four items plays an important role in the explanation. The average size of the contribution of each item (taken without regard to sign) is as follows:

	<i>Percentage points</i>
The Constant (representing basic trends in output and productivity)	0.786
Abnormally high or low growth of output between the two years	0.87
Deficiency, or surplus, of labour force in first year relative to 'requirements'	0.81
Abnormally high or low level of vacancies	0.56

It is satisfactory to note also that each one of these items made a higher average contribution than the 'unexplained' part, which averaged 0.38.

Productivity Movements, 1954 to 1965

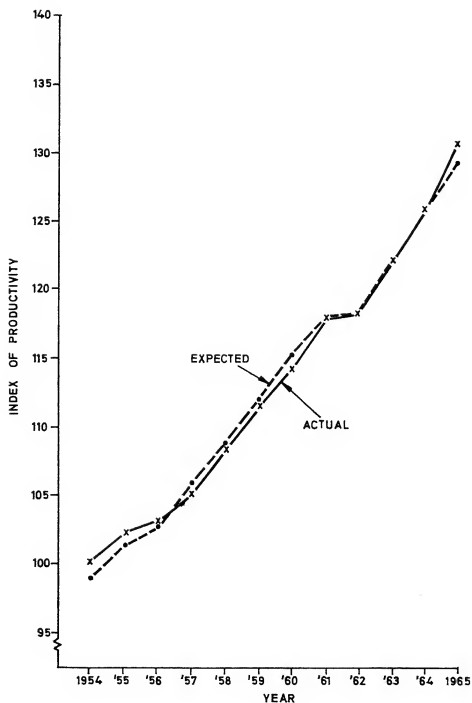
If one arrives in this way at a 'prediction' of the change in the number of people at work between one year and the next, one can easily build up a series for the number 'expected' to be at work in each of the years in our period: these figures are given in Table F.7. One can then use these figures to calculate the expected level of productivity in each year; the results of doing this are reflected in Figure XI.3, which compares the 'predicted' level of productivity in each year with the actual value. It is of course also possible to compare this sophisticated prediction with the one based on a simple trend in productivity, but the inclusion of a third line which would be very close to the others would make the diagram very confusing.

The degree of agreement between 'actual' and 'expected' shown in Figure XI.2 is clearly good: the average difference is in fact under 0.6 per cent, which is an unexpectedly satisfactory result to obtain when the 'expected' series has been derived from an employment series which was compiled by adding the 'expected' change in employment for each year to the sum of the previous expectations (which gives plenty of scope for errors to accumulate).¹ Indeed, this body of data provides a very much more solid set of statistical rules than we had expected to devise, with which to calculate what one would have expected to find in later years, in the absence of abnormal factors. Nevertheless, we cannot automatically assume that differences between 'actual' and 'expected' in 1966 to 1968 are wholly attributable to SET: there is always the possibility that other 'new' factors may have come into operation in the same period, and indeed the progressive weakening of resale price maintenance might well play that role.

In the analysis which follows we refer to the deviations between 'actual' and 'expected' as representing 'the SET effect' (plus, of course, possible errors), but this should be regarded as no more than shorthand for 'the effect of abnormal new factors'.

¹ A friendly commentator suggested that this result was due to our introducing *actual* employment figures into the calculation in each year in order to calculate the initial deficiency for estimating the next year's movements. We therefore tried calculating these initial deficiencies by using at each stage the *expected* employment, based on the calculations for the earlier years, so that the equation would have to work through cumulatively from 1954 to 1965 with no help from any employment data. The result was to produce a marked *improvement* in the goodness of the fit, by every test which was at all relevant: the average error in the derived productivity series was reduced from 0.6 per cent to 0.4 per cent.

FIGURE XI.3
Actual and 'Expected' Productivity in Retailing, 1954-65



The method of deriving the 'expected' figures is explained in the text.

The basic figures for the output of the retail trade, its employment and its productivity are fully set out in Appendix F, and we have first to apply our analytical tools to see what they tell us about the effects of SET in the field of employment. The reader is reminded that we are using the term 'employment' as shorthand for the annual average level of numbers engaged (including self-employed), measured in terms of full-time-equivalent persons.

Employment Change, 1965 to 1966

The basic statistical rules would have led us to expect a change in employment between 1965 and 1966 of +0.62 per cent, made up as follows:

	<i>Percentage points</i>
Constant term (for basic trends)	+0.786
Abnormally low increase in output	-1.32
Initial deficiency of labour in 1965	+1.72
Abnormally high level of vacancies in 1966	-0.56
	<hr/>
Total expected	+0.62
	<hr/>

The actual movement between these two years was, however, a *decrease* of 1.03 per cent, and the difference (1.65 per cent of the 1965 employment) is the 'best estimate' for the reduction in employment 'as a result of abnormal new factors'—which equals 1.64 per cent of the 'expected' employment. This figure is a rather uncertain 'best estimate', because in past years unexplained items have ranged up to a figure of 1.06 per cent (see Table F.5). Nevertheless, it is properly to be regarded as the best estimate, because there was no *a priori* reason for expecting the error term in the 1965-6 movement to be either positive or negative: hence we do not know whether it would be better to take a higher figure or a lower one than 1.65 per cent as our estimate for the 'true' SET effect. A determined sceptic about the influence of SET could legitimately assert (so far as this evidence goes) that there is no *proof* that SET had any effect at all; but it would be equally legitimate for a determined opponent to say that the effect might have been twice the size.

Employment Change, 1966 to 1967

In order to assess what change in employment was to be 'expected' between 1966 and 1967 we must first decide what is to be regarded as the 'deficiency' in the labour employed in 1966. If we used the old formula to calculate the number 'required' (by reference to the pre-SET productivity trend), there would inevitably appear to be a large deficiency, which would make us 'expect' a large increase in employment between 1966 and 1967: the more SET saved labour, the greater the recruitment which the formula would lead us to 'expect' in the next year—and the greater the computed labour-saving for the next year would appear.

Clearly, then, we must arrive at the 1966 labour 'requirement' by subtracting from the amount calculated by reference to the old productivity trend an amount to represent the saving due to the SET effect in 1966. An alternative way of putting the same thing is to say that the 'trend' figure for productivity in 1966, to be used in calculating the labour requirement, is the old trend *plus* the gain due to the SET effect to date.

For the moment we assume that the SET effect was correctly estimated at 1.64 per cent—we shall examine below the consequences of assuming that there was an error term in this. With that assumption, the change in employment 'expected' between 1966 and 1967, without any allowance for *further* SET effects, comes out at -0.34 per cent, made up as follows:

	<i>Percentage points</i>
Constant term (for basic trends)	+0.786
Abnormally low increase in output	-1.28
Initial surplus of labour in 1966	-0.31
Abnormally low level of vacancies in 1967	+0.46
	<hr/>
Total expected	-0.34
	<hr/>

Actually, however, the decrease was 1.89 per cent, so that our best estimate for the additional SET effect between 1966 and 1967 is 1.55 per cent of the 1966 employment. As before, this figure is subject to statistical uncertainty, but there is nothing in the procedure adopted to make it more likely that the true effect would be lower rather than higher. Added to the SET effect already secured in the first year, this gives a total saving of 3.16 per cent in 1967 as against what would have been expected under the old rules.

It is perhaps worth noting what the calculation would have shown if we had assumed that part of the apparent SET effect in 1966 had been due to unexplained items, and we may conveniently take the extreme assumption that the *whole* was accounted for in that way, so that there was no SET effect at all. On that assumption the 'required' employment would be calculated in the old way, and would be 1.65 per cent higher than in our previous calculation. Consequently there would be an initial deficiency in employment of 1.40 per cent instead of an initial surplus of 0.25 per cent, and the item in the above calculation would change from -0.31 to +1.74. The total expected change would then be +1.71 instead of -0.34; as the actual change was -1.89 per cent, the best estimate of the SET effect is 3.60 per cent.

Taking the two years together, therefore, the consequence of being sceptical about the effect of SET in the first is actually to *increase* the estimate for the two-year total (and this is true whatever proportion of the first year's result is attributed to 'unexplained items'). One can, of course, reckon that the figure of 3.60 per cent should be reduced on the grounds of 'unexplained items' for that year, but it is not plausible to assume that this could reduce it to zero.

Employment Change, 1967 to 1968

Accepting the best estimate of the SET effect in 1967, the figures for the 'expected' change between 1967 and 1968 (apart from any further SET effect) come out as follows:

	<i>Percentage points</i>
Constant term (for basic trends)	+0.786
Abnormally low increase in output	-0.64
Initial surplus of labour in 1967	-1.03
Abnormally low level of vacancies in 1968	+0.26
	<hr/>
Total expected	-0.62
	<hr/>

Against this 'expected' decrease of 0.62 per cent, there was in fact a decrease of 2.41 per cent, giving a best estimate of the further SET effect of 1.79 per cent. This is again subject to statistical uncertainty, but again there is nothing in the procedure to suggest that the 'true' figure, if one could know it, would be more likely to be lower rather than higher.

Looking at the three years together, we thus find a substantial SET effect for each one of them, and in each case this effect is considerably greater than the 'unexplained items' figure for any single year in the period 1954 to 1965. The results may usefully be brought together in a single table, which also gives the cumulative effect (allowing for the fact that each year's 'saving' was a percentage of the labour employed in the previous year), as follows:

TABLE XI.1 *'SET Effect' in Terms of Manpower Saved*

Year	Percentage saving in manpower compared with number expected on pre-SET experience <i>plus</i> 'SET effect' up to the previous year	Manpower engaged as a percentage of pre-SET 'expectations'	Percentage saving in manpower compared with number expected on pre-SET experience
1966	1.64	98.36	1.64
1967	1.56	96.84	3.16
1968	1.80	95.11	4.89

N.B. 'SET Effect' is shorthand for 'the effect of abnormal new factors'.

The allocation of the total effect between the three years is inevitably uncertain but we have no particular reason to regard any other allocation as more plausible. Subject, however, to any doubts about the emergence of a serious downward bias in the employment figures since 1965 (which we discuss briefly in the final section of this chapter), the reality of a substantial SET effect can hardly be regarded as open to any doubt—though we should repeat the warning that the phrase 'SET effect' is shorthand for 'the effect of abnormal new factors'.

CHANGES IN PRODUCTIVITY SINCE 1965

The picture in terms of productivity follows automatically from our calculations of the 'expected' changes in employment, since one can calculate the SET effect in terms of productivity by comparing the actual rise with the rise which would have emerged with the expected change in employment. Nevertheless, 'extra productivity' is a more natural way in which to express the gain through the SET effect, and it is helpful to see how the thing looks in these terms.

First of all, Table XI.2 shows the 'SET effect' in productivity terms for each of the three years, and also the total effect which one derives from a comparison between 1965 and 1968. These figures are essentially the counterparts of the employment analysis which we have just worked through, but they show a gain in productivity instead of a saving in employment.

It may seem strange that the gain over the three-year period should be over 5 per cent, when our original graph (Figure XI.1) showed productivity as being significantly above the trend line in the post-SET years, but not to as great an

TABLE XI.2

'SET Effect' in Productivity Terms

Years compared	Actual percentage rise in productivity	Expected percentage rise in productivity on pre-SET experience	'SET effect' gained between the two years compared, as a percentage of expected level in end year	Cumulative 'SET effect' (percentage)*
1965 and 1966	2.5	0.8	1.7	1.7
1966 and 1967	3.4	1.8	1.6	3.3
1967 and 1968	4.8	2.9	1.8	5.1
1965 and 1968	11.1	5.6	5.1	—

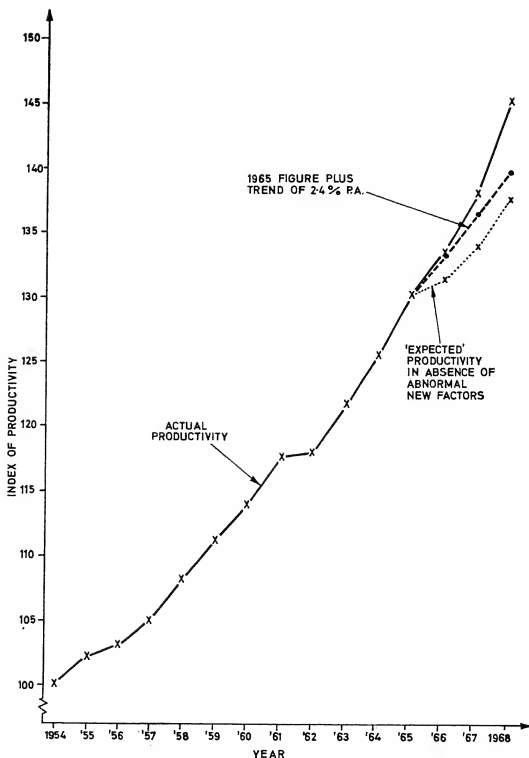
* Gain in productivity in the terminal year named in column one, as a percentage of productivity which would have been expected on pre-SET rules.

extent as this. The explanation is, however, very simple. The plain trend shown in Figure XI.1 naturally takes no heed of whether the years in question are ones in which we would expect the productivity to be below trend or above trend, so that any attempt to estimate the effects of SET by comparing the actual index of productivity with the trend line makes no allowance for the influence of the state of trade. As it turned out, the years 1966, 1967 and 1968 *all* showed a smaller-than-average increase in the volume of sales, so that by 1968 the level of sales was well below trend—a factor which tends to depress productivity below its trend line. Similarly, in both 1967 and 1968 the level of vacancies in the country was below average, and this slackness in the labour market also tends to push productivity below its trend. Thus although Figure XI.1 correctly suggested that the SET effect on productivity was positive (since the points are significantly above the trend line), it did not bring out the fact that the external circumstances in which the retailers were operating would have led one to expect productivity to be below the trend line in 1967 and 1968: consequently an assessment of the SET effect from Figure XI.1 would be too low.

The importance of the SET effect is illustrated in Figure XI.4, which shows the expected movement in productivity after 1965, and also shows how it would have moved if the plain trend of 2.4 per cent per annum were applied to the 1965 figure as the starting point. This diagram serves to put the SET effect into visual perspective, as against the historical development.

Finally, a further point is worth emphasising. Our method of calculating the SET effect takes the position in 1965 as the standard for comparison, because we approached everything through calculating the *annual change* in employment (and hence productivity) which was to be expected in each year under the normal statistical rules. As can be seen from Figure XI.1, however, 1965 is a year in which productivity was above trend, and—much more important—Figure XI.3 shows that 1965 was also a year in which productivity was above the level which one would have expected from our more sophisticated analysis. In taking 1965 as the benchmark, therefore, one is setting a rather high standard. We believe this to be the correct procedure in view of the form of our analysis, and we decided to

FIGURE XI.4
Productivity in Retailing, 1954-68, and 'SET Effect'
 (1954=100)



The dotted line shows what would have been expected 'in the absence of abnormal new factors' for the years after 1965, taking productivity in that year as starting-point; the broken line shows the effect of a trend of 2.4 per cent per annum. (See discussion in text.)

adopt it before we knew what the figures would show: but it is a point on which statistical debate is possible, and we feel it right to draw attention to the matter.¹

RELIABILITY OF THE RESULTS

It is very common for workers in applied economics to end up with results which are subject to so large a margin of uncertainty that one hesitates to draw any firm conclusions. In a field so full of statistical pitfalls as this one—and with the task of isolating the effects of a single factor from those of many others—we certainly did not expect to arrive at results which looked anything like as convincing as the ones portrayed in this chapter. We expected, indeed, to have a very difficult task of assessing what conclusions (if any) could legitimately be drawn, and with what degree of confidence.

In the event, the figures have come out both large and surprisingly consistent from one year to another. It is very tempting to leave them to speak for themselves, without any comment on their limitations: we felt, however, under a special obligation to scrutinise the various ways in which a spurious result might have managed to intrude itself.

The problems come under two broad heads: methodology and data. The factors overlap somewhat, but it is easiest to consider first what might have gone wrong if the data were all accurate, and then come to the problems which spring from the uncertainty of the data.

The Methodology

We have already noted that the 'explanation' of pre-SET movements in productivity was surprisingly good: it might seem legitimate to let Figure XI.3 speak for itself, with the support of the footnote on page 88 which was inspired by our commentator. Moreover the choice of this statistical explanation does not rest simply on the 'accident' that it happened to fit over this period, but reflects also a process of economic reasoning: this is set out in the earlier part of this chapter, which was in fact written long before any of the figures were available.²

Nevertheless it is clearly wise to try more than one way of setting up the pre-SET rules, in order to see whether different methods would lead to seriously different answers. We therefore tried a variety of methods, one of which was the 'labour market approach', the results of which are portrayed in Figure XI.2, and discussed further in the footnote on this page. We found that these methods all led to much the same result—in the sense that (for example) the productivity

¹ The point may also be seen in relation to Figure XI.2, which showed a scatter-diagram of the deviations of productivity from its trend against the percentage of vacancies. In that case, the analysis did not run in terms of the *changes* between one year and the next, but in terms of the actual figures for each year. If this rather simpler approach were used to estimate the SET effect, it would be more correct to look at the distance between the regression line and the crosses representing the post-SET years, and not to bring 1965 as such into the estimation: one is comparing the position in the post-SET years with what one would have expected from the general body of data representing the 12 years from 1954 to 1965.

On this basis the productivity gain in 1967 and 1968 would have been put at 2.9 per cent and 5.1 per cent respectively: the differences in the answers are thus very small.

² It was 'inspired' by the results given in the article by K. D. George in the *Bulletin of the Oxford University Institute of Economics and Statistics* (Vol. 31 No. 2, 1969); it embodied, however, one change from the statistical factors used in that article, because economic logic seemed to require this. When our figures became available (which differed radically from those used in the article) the econometric result supported this change.

gain in 1968 always came out in the range of $5\% \pm 1\%$ —and to avoid complicating the presentation we concentrated on setting out one method in full.

These calculations all had, however, one thing in common—an assumption that the basic trend in productivity could be regarded as uniform over the years 1954 to 1965.¹ Discussion with various experts led us to realise that this assumption might be having an undue influence on the answers, and that we ought to try methods which did not involve making it.

It has to be recognised that one's confidence in the results of any economic analysis which relies largely on a basic time-trend is bound to be weakened somewhat by the introduction of more complex assumptions about its shape. Any analysis which assumes the existence of a basic trend is not giving a *causal* explanation for the rise in productivity, such as one would get (for example) if this were being attributed to capital invested in new shops, and one had statistics for this: the basic trend is merely a reflection of the observed productivity figures, which one can plausibly regard as reflecting the influence of certain factors—new capital, better methods etc.—but one has no independent measure of these and their strength might change. If one can reasonably assert that a basic trend has been stable for twelve years, it is a reasonable assumption that it would have continued at the same rate for a further three: if the basic trend does not appear to have behaved in such a convenient way, assumptions about what its subsequent behaviour would have been are bound to be less convincing.

To put the point in another way, the magnitude of any type of trend—fixed or changing—can only be derived from the data by first postulating its *form*. We had postulated the simplest form—a uniform percentage rise each year—partly because it is, in a broad way, inherently plausible on economic grounds, partly because it would be the most 'convincing' type of trend to use if it were justified, but mainly because it seemed to be in good accord with the facts (as can be seen from Figure XI.1). In the nature of the case some other assumption was bound to give a rather better fit: one cannot expect that the simplest assumption will beat all the other possibilities in the complex field of the real world. The question at issue is 'how much improvement in fit for how much complexity, and how much difference does the change make?'.

Close examination of the data showed that a rather better fit could be obtained by a change in the assumption to one which postulates a modest increase in the basic trend of productivity growth in the second half of the period, despite the fact that the fit was very good with the simple assumption. An assumption of a rather higher basic trend of productivity growth in the 1960's cannot be rejected as economically implausible, so that one needs to tests its quantitative importance.

This opens up a veritable Pandora's box of alternative possibilities. Should one assume that the rather higher basic trend would have continued unchanged after 1965, or that the trend would have reverted to its earlier level, or that the acceleration process would continue? And how *exactly* should one assess what had already happened?

To get some light on our problem we have tried a variety of methods which we thought that a statistician might have used if he had been given the task in 1966 of estimating what the future level of employment and productivity would be in the various future years (to correspond with certain levels of sales, vacancies etc.), on the assumption that there would be no abnormal new factors.

¹ In our main method, this comes into the analysis indirectly, through the calculation of 'required' employment (and hence of the 'initial deficiency').

We did not think that the statistician would have assumed any further rise in the basic upward trend of productivity beyond what had, in some sense, already happened, but we considered the various ways in which he might arrive at a higher figure than arose from our own basic assumption. Thus he might have taken a shorter period for his analysis (e.g. 1959 to 1965) so as to give all the weight to recent years, or he might have used the whole period from 1954, but assumed a 'split' trend—with one rate prevailing up to 1959 and another one (which would come out rather higher) from 1959 onwards.

It would have been desirable to spend a considerable time on this research, which is decidedly complex. We have however done enough work to make it appear unlikely that any reputable method would raise the figure in Table XI.2 for the 'expected' rise in productivity over the three years between 1965 and 1968 by much more than $1\frac{1}{2}$ percentage points: from another point of view this means that it is unlikely that the adoption of any other 'prediction' method would lower the estimated gain in productivity as a result of abnormal new factors below $3\frac{1}{2}$ per cent for 1968. Of the ten methods which we tried, only two gave answers below 4 per cent.

On the other side we should report that our expert advisors reinforced our own doubts about the legitimacy of including 1965 in the reference period used to establish the pre-SET rules, on the grounds that the ending of RPM was already having an important effect on some traders in that year, and that our analysis has to treat that factor and SET in combination. If 1965 is omitted the strength of the case against assuming a uniform trend is considerably weakened, and the outcome of the calculations which we have made—even using a short reference period, so as to get the highest productivity trend—concentrates around an 'abnormal factors effect' in 1968 of $4\frac{1}{2}$ per cent, or perhaps a little higher. Using the full period from 1954, and assuming a constant trend, the answer would be raised somewhat above our basic estimate of 5.1 per cent.

In all the circumstances we did not feel justified in holding up the Report to permit more extended research: so far as the effects of methodology are concerned, the picture which it gives seems to be broadly right in its essentials. If necessary we will include an appendix in our Second Report dealing with the matter in more detail.

Before leaving the subject of methodology, however, we would like to add one point of a quite different character. If we had chosen *unemployment* as our indicator of the state of the labour market, the estimates of the SET effect would have come out significantly higher, because the unemployment figures suggest a much 'easier' labour market since 1965 than do the vacancy figures. We did not, however, choose vacancies in order to get a conservative answer, but because it seemed to be the best indicator.

The Data on Output

We saw above that the size of the SET effect comes out a good deal larger than one might expect from a simple comparison between actual productivity and its trend value—such as one can see in Figure XI.1—and that the reason for this is that our equation tells us that productivity in 1967 and 1968 would normally have been below trend. The main reason for this expectation is that the level of the retailers' output (the measurement of which is based on the volume of retail sales) was depressed in 1967 and 1968, and this might suggest

that the estimate of the SET effect was put spuriously high, because the output index was too low.

It is, of course, quite possible that the Board of Trade's index for the output of retailing was too low for these years, but any such argument would nevertheless be wholly mistaken. If we assumed that the index for 1968, for example, ought to be raised by 1 per cent, then we would admittedly raise the 'expected' level of productivity by about 0.2 per cent: we would also, however, raise the figure for the *actual* level of productivity, by a full 1 per cent, so that the estimate of the SET effect would actually be *raised* by 0.8 percentage points.¹

This suggests, of course, the alternative possibility of assuming that the output index is too *high*: if one put the error at 1 per cent in this direction, the SET effect would be reduced from 5 per cent to about $4\frac{1}{4}$ per cent.

We do not feel capable of expressing any view as to whether the output index should be considered more likely to be too high or too low, but we would be surprised if the error proved to be large enough to have much impact on the calculation. The index actually shows a rise of rather over 5 per cent in the three years from 1965 to 1968, which is of course a much smaller rise than is usual in a three-year period: anyone who tried to argue, for example, that the true figure was really lower than 4 per cent would come up against problems of consistency between retail sales and other national income statistics, and in our view these would make his case seem highly implausible.

The Data on Labour

We have discussed in Appendix D the technical problems of arriving at estimates for the full-time-equivalent of the labour force in retailing; although there is an inevitable margin of uncertainty, we do not think that there is any particular bias in the methods which we have adopted, or that the errors could be of any real importance for the present purpose, unless one makes rather strong assumptions about the evasion of National Insurance.

On this matter as such there is little that we can say. We did in fact make some indirect allowance for evasion as part of our method of reconciling the movements in the number of self-employed between 1961 and 1966, as shown in the Census of Distribution, the Census of Population, and the insurance card statistics (see page 274). It would seem to us *a priori* plausible that there has been some further evasion,² and work is in hand to get further light on this matter: we hope to say more on the subject in our Final Report, and indeed it will not be possible to write a satisfactory report on construction without taking a view on the matter. But for the moment it does not seem wise to say more than that evasion on the scale needed to wipe out the SET effect (i.e. a total of over 100,000 full-time-equivalent people in retailing in 1968) seems inconceivable.

There is, however, an indirect approach available which causes no embarrassment. We have done the analysis in this chapter entirely by reference to the

¹ In terms of the alternative method based on Figure XI.2, the assumption that the 1968 output figure was too low would simply raise the 'cross' representing that year, and so raise the estimated SET effect by 1 percentage point.

² Contacts with students seeking casual employment in the vacation also provide some 'straws in the wind', of the type revealed in one report of a statement by an employer: 'I pay £10 for your work in the cafe; if you want National Insurance stamps you must buy them out of that—that is your affair'. The higher the cost of the stamp, the greater the incentive to evasion.

'aggregate' statistics, rather than to the results of our own enquiries. The fact remains, however, that the results of those enquiries are remarkably consistent with the aggregative figures (see Table IX.2), and the same thing is also true for wholesaling (Table IX.5). We did not rate the reliability of our enquiries very highly, but the work on the two approaches was kept rigidly separate, being done by different people with no sort of collusion. Moreover the retail enquiries in particular produced a far greater degree of internal consistency (between trades and between years) than we had thought at all likely, so that a whole battery of at least semi-independent straws seems to be pointing the same way.

'Other Abnormal Factors'

We have set out our reasons for believing that our estimates of 'the SET effect' are not seriously biased in any ascertainable direction (though one could make out a better case for saying that they have a small upward bias rather than the reverse), and also for our belief that the inevitable statistical uncertainty is not great enough to destroy their usefulness. We should conclude by repeating the warning that we use the expression 'SET effect' as a shorthand for 'the effect of abnormal new factors', and this point deserves a little elaboration.

In brief, our method automatically allows for the basic upward trend in productivity and for all factors which affect retailing through the level of demand or the general state of the labour market: the squeeze on demand in all its various forms is covered in this way.

We have *not*, however, allowed for such factors as the progressive ending of resale price maintenance, which affect retailing by altering the nature of the competitive process. If there were no specific factor which one could name, this point could probably be dismissed as the sort of argument used only by people who refuse to believe anything: the sudden and progressive departure of the productivity curve from a well-founded set of rules, just at the time when SET began, would make the idea of an unspecified 'other factor' seem very implausible.¹ But the ending of RPM is a factor which works on retail productivity in a very similar way to the introduction of SET, and the analysis of margins in Chapter XIII suggests that it has been important. Unfortunately its progressive application to more and more goods is very close in timing to the introduction of SET, and we have not yet been able to devise a technique for separating their effects.

¹ There is, however, the argument that productivity in manufacturing seems to have accelerated its growth, relatively to what was to be expected on previous rules, at much the same time—the evidence for which has become much more convincing since the preparation of the new index of production.

On this we can say very little, since a proper assessment of the position in manufacturing would require research on a scale which is beyond our powers. We did do a very simplified analysis, which suggested that there was indeed a break from the previous rules in the course of the 1960's, but that it was not as clear-cut in its timing as in distribution: a more elaborate set of 'rules'—involving the stock and age of capital in use, for example—might show that there was really no break at all, or that it was more clear-cut than the one which we found.

It seems right to mention this point, but its relevance to the results of the analysis of distribution requires a belief in a powerful *common* factor, which explained the acceleration both in manufacturing and in distribution—e.g. a general wave of productivity drives in all types of enterprise, inspired by the advent of a new Government. The fact (if it is a fact) that departures from the old rules took place at much the same time in the two sectors is perfectly compatible with attributing the one in distribution to the SET—RPM combination and the manufacturing one to some different 'new factor'.

Logically, one might perhaps try to judge something from the varying behaviour of the individual trades, as shown in Table IX.1, since the importance of RPM and the timing of its demise varied from trade to trade: we feel however that it would be pressing our luck a bit too far to try to deduce much from inter-trade differences in the results of a sample which we regard as indicative rather than scientific, and of course we do not have separate figures for the 'expected' movements in productivity for each trade. The only other clue is that Figure XI.3 shows a rise in productivity above the expected level for 1965, which is big enough to look suggestive, in a year when RPM was weakening and SET had not been invented: but a single year is too frail a basis on which to rest a division.

We can only conclude by repeating that our calculations of the productivity gain 'since 1965' take that higher figure as the yardstick, and expressing an intuitive belief that both SET and the changes in RPM have played an important role in producing it.

CHAPTER XII EFFECTS ON PRODUCTIVITY IN WHOLESALING

We have already referred (Chapter IX) to the statistical difficulties in preparing an estimate of the productivity movements for wholesaling. The uncertainties relating to the data were such that we did not consider it worthwhile to adopt as elaborate an approach to the analysis of productivity, as was the case with the retail trades. Rather we attempted a fairly simple analysis, and decided to restrict the analysis to non-industrial wholesalers only (i.e. Minimum List Heading 810 in the 1958 Standard Industrial Classification; this includes wholesale distribution of petroleum).

As in the case of retailing, we conduct the analysis in this chapter entirely in terms of the aggregate statistics for the whole industry, and bring in the results of our enquiry only when considering the reliability of the answers. The basic material is, therefore, essentially the Board of Trade's index for the output of non-industrial wholesaling, and the D.E.P. data on the labour force (as adjusted in Appendix D).

TREND OF PRODUCTIVITY AND DEVIATIONS

If one considers movements in productivity over a decade, it is natural to expect to find an upward trend, reflecting such factors as improved methods of wholesaling, and an increase in capital per person employed. Over the period 1954 to 1965 the trend increase was approximately 1.5 per cent per annum compound, and is shown by the line in Figure XII.1.

It is also evident from Figure XII.1 that there are quite marked deviations from the trend, and that these are generally positive in years when the level of activity is high (e.g. 1955, 1960, 1961) and negative in years when it is low (e.g. 1958 and 1963); the most marked exception to this generalisation is that 1957 shows a low level of productivity, but this is to be explained largely by the small amount of petroleum products available for distribution whilst the Suez Canal was closed.

To test this hypothesis more formally we examined the relationship between the percentage deviations of productivity from trend, and the percentage deviations of the wholesalers' output from its four-year moving average (since the typical cycle has lasted four years). The results for the period 1954-65 can be seen visually in Figure XII.2, and may also be summarised in the following equation:

$$Y = -0.271 + 1.71X \quad (r^2 = 0.70)$$

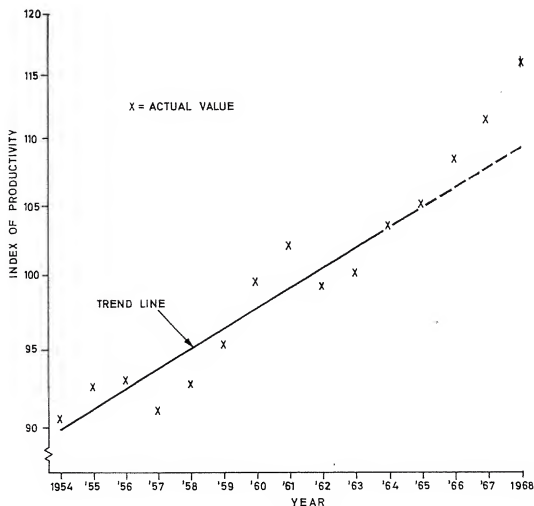
where Y is the percentage deviation of productivity from trend;

X is the percentage deviation of output from the four year moving average.

In words, the equation tells us that in years when output is one per cent above the four year moving average, we expect to find a positive deviation of productivity from trend of about 1.7 per cent.¹ The degree of statistical explanation,

¹ Part of the reason for this is that such years are years in which the general labour market is tight, and this affects the wholesalers' employment.

FIGURE XII.1
Non-Industrial Wholesalers: Productivity Trend 1954-65
 (1963 = 100)



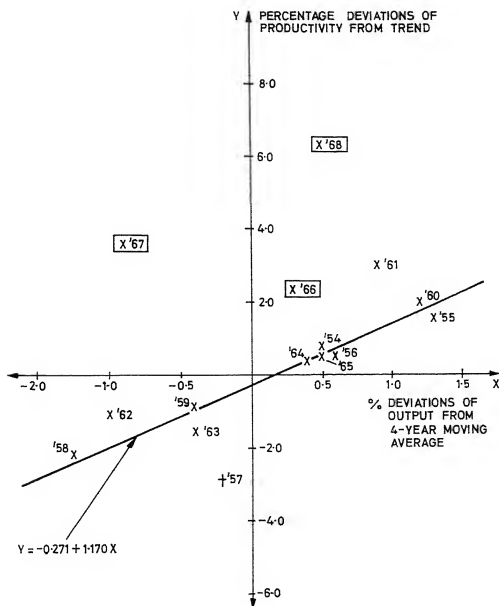
The object of this diagram is to show how far the actual figures for productivity from 1954 to 1965 fit with a line showing an upward trend of 1.5% per annum. The observations have therefore been plotted on a log scale.

The figures for 1966 to 1968 were *not* used in fitting the trend, but are shown here for convenience.

The coverage of the statistics is SIC 810 on the 1958 classification.

FIGURE XII.2

Non-Industrial Wholesalers: Percentage Deviations of Productivity from Trend in Relation to Percentage Deviations of Output from 4-year Moving Average, 1954-65



† The 1957 figure for productivity was depressed by the small flow of petroleum products, caused by the closure of the Suez Canal.

The markings for 1966, 1967 and 1968 were not used in the fitting of the line, but are included because their distance from the line provides one means of showing how far abnormal factors were raising productivity in those years. The output deviations for 1967 and 1968 are partially estimated, since their calculation requires a four-year moving average.

as shown by the square of the correlation coefficient is 70 per cent: this was a most unexpectedly good result to get with our first shot, and we decided that the basic data were not good enough to justify spending time on a search for a better fit.

ACTUAL AND EXPECTED PRODUCTIVITY

Figure XII.2 also includes crosses to represent the position in 1966, 1967 and 1968, although these years were not of course used in fixing the regression line. It emerges clearly that actual productivity was above trend in those years by far more than one would expect from the level of trade¹—or, alternatively that the 'expected' figure for productivity is much lower than the actual one. This is particularly so for 1967 and 1968. For 1967, the actual deviation of productivity from trend is 3.6 per cent, whereas the expected deviation is -1.7 per cent; for 1968 the actual and predicted deviations are 6.3 per cent and 0.6 per cent respectively.

These results may be seen very conveniently from Figure XII.3 (which also serves to show how well the movements in productivity were 'explained' by our econometric analysis for the period 1954 to 1965). This diagram has been prepared by adding the expected deviations of productivity from trend for each year to the value for that year, and the resultant figures for the expected productivity index are shown from 1954 to 1968. The actual productivity is also shown, and for 1965 the actual and expected productivity happen to be the same. Consequently we do not have to argue whether one should make any allowance for the 1965 discrepancy in assessing the effect of SET (and any other special factors) in subsequent years: this can be done directly, by reading off the differences between the curves of actual and expected productivity.

There clearly is a marked divergence between actual and expected productivity for all years after 1965. In terms of figures the position is summarized in Table XII.1.

TABLE XII.1
*'SET Effect' in Productivity Terms for
Non-Industrial Wholesalers*
(Index numbers, 1963 = 100)

Year	Actual Productivity	'Expected' Productivity	Difference as a percentage of 'Expected'
1965	104.9	105.0	-0.1
1966	108.1	106.0	2.0
1967	111.1	105.4*	5.4
1968	115.6	109.3*	5.8

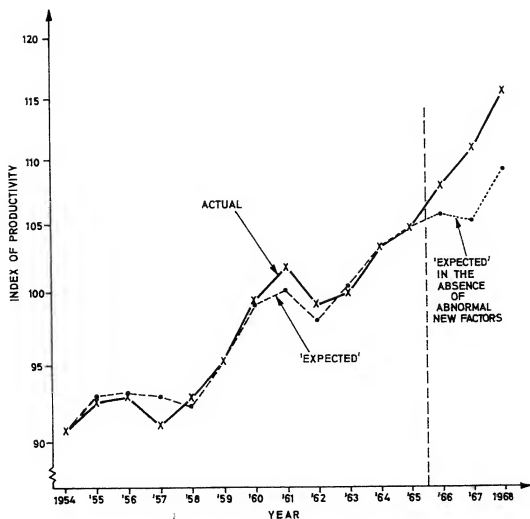
* Partially estimated (since the 4-year average is not yet known).

N.B. 'SET Effect' is shorthand for 'the effect of abnormal new factors'.

¹ As we judge 'the level of trade' from a comparison of actual output with a centred 4-year moving average, we had to make assumptions about the level of the index of output in 1969 (and, less importantly, 1970).

FIGURE XII.3

Non-Industrial Wholesalers: Actual and 'Expected' Productivity, 1954-68
(1963 = 100)



The left-hand part of the diagram shows the extent to which a productivity series constructed according to our 'pre-SET' rules' agrees with the actual series.

The right-hand part shows the influence of abnormal new factors after 1965.

The observations have been plotted on a log scale.

The method of deriving the 'expected' figures is explained in the text.

The significance of this table is best considered along with a discussion of the reliability of the figures, and this is done in the next section. It is however of some interest first to compare the results with the less sophisticated ones which can be obtained from the same data by a single comparison between the actual figure for productivity and its trend (such as one can deduce from Figure XII.1). Fortunately 1965 is very close to the trend, as well as to our 'expectation' (because output in 1965 was close to the moving average), so that there are no awkward complications.

In 1966 the answer comes out much the same by each method, because 1966 was also a year with average output, but in 1967 the level of wholesalers' business was depressed, and the level of productivity would be expected to be below trend: in consequence, the answer from Figure XII.1 would have been a good deal too low (about $3\frac{1}{2}$ per cent, instead of $5\frac{1}{2}$ per cent), because it makes no allowance for that factor.

1968 saw a marked recovery in wholesalers' output, and our provisional assessment was that it was slightly above the 4-year average (which of course we do not yet know). On this basis the two methods give broadly similar results, but the simple trend approach would have given a slightly higher answer than the one which we have shown.

RELIABILITY OF THE RESULTS

As with our investigations of the SET effects on productivity in retailing, we were decidedly surprised to find both that the econometric explanation worked so well and that the results of applying it to the figures for 1966 to 1968 gave so strongly positive an answer.

After reviewing the various possible ways in which a spurious result might have emerged, however, our conclusion is essentially the same as in the case of retailing. There can be no real doubt that 'abnormal new factors' have had a strong upward effect on productivity since 1965; the ending of resale price maintenance may well have been an important element in this, but it would be perverse to argue that SET was not.

In arriving at this conclusion we are naturally influenced by what we saw in Chapter IX about the historical record—i.e. that our own enquiry showed a surprisingly similar movement in productivity to the completely independent one done on the aggregate statistics. We would not have rated the accuracy of either approach as very good, but the degree of agreement adds greatly to their persuasiveness—especially when there was similar agreement in the retail field. The likelihood of so many pairs of errors turning out equal by coincidence seems very small.

We were also influenced by the result of various sensitivity tests which we made, and which failed to disturb the broad picture. Thus in calculating the 'output deviation' in 1968 (and to a lesser extent 1967) from the 4-year moving average, one needs assumptions about the level of sales in 1969 (and to a lesser extent 1970): we tried taking what seemed the lowest plausible figures—with no increase at all between 1968 and 1969—and this only reduced the 'abnormal factors effect' for 1968 by about half a percentage point.

On the other side, however, we would like to emphasize that our figures are subject to sizeable margins of error, and must not be pressed into use to answer questions which require great accuracy—even as rough indications. Thus we are doubtful whether any real significance should be attached to the

fact that our figures show the effect of abnormal factors on productivity as rather greater in wholesaling than in retailing: admittedly this is a plausible result, in view of the fact that the profit squeeze has been rather greater in wholesaling—largely because of the anomalous working of the tax which is discussed in Chapter XVI—but the statistical uncertainties forbid any confident statement on the matter.

Similarly the fact that the 'abnormal factors effect' for wholesaling comes out much the same in 1968 as in 1967 cannot be taken as implying anything about what further gain (if any) is to be expected—quite apart from the effects of the rise in SET. Our methods are not precise enough to throw light on such fine points.

RETAIL AND WHOLESALE TRADES COMBINED

Finally, we may refer to a set of calculations which we made in relation to retailing *plus* non-industrial wholesaling combined. The logic behind these was that one might regard these trades *together* as primarily fulfilling the function of getting goods from the producer to the consumer, and that it was not really relevant whether these went through a wholesaler or not so long as the job was done: hence the measure of output for the combined trades should be the volume of *retail* sales, and the combined labour force is regarded as engaged in making this possible.¹ The analysis which was undertaken was exactly the same as that done for retailing separately, which has been explained in detail in Chapter XI. Furthermore, the results of the analysis were, inevitably, rather similar to those obtained for retailing alone. The same output series is used in both, and on the labour side the figures of persons engaged in wholesaling are only one-quarter the number of those engaged in retailing and do not move very differently, so that movements in the combined labour force are also rather similar to those for retailing.

The results of the exercise for retail and wholesale trades combined are given in full in Appendix F. Here, it is sufficient merely to show our best estimate of the effect of SET and other abnormal new factors. This is shown in Table XII.2 which is to be interpreted in exactly the same way as Table XI.2.

TABLE XII.2 '*SET Effect*' for Retailing and Non-Industrial Wholesaling Combined

Years compared	Actual percentage rise in productivity	Expected percentage rise in productivity on pre-SET experience	'SET Effect' gained between the two years compared, as a percentage of expected level in end-year	Cumulative 'SET Effect' (percentage)*
1965 and 1966	2.6	1.0	1.5	1.5
1966 and 1967	3.5	1.4	2.0	3.6
1967 and 1968	4.4	2.6	1.8	5.6
1965 and 1968	10.9	5.0	5.6	—

* The gain in productivity in the terminal year named in column one, as a percentage of the productivity which would have been expected on pre-SET rules.

¹ Various other considerations are set out in Appendix F.

CHAPTER XIII THE EFFECTS OF SET ON MARGINS AND EXPENSES

The task of establishing 'pre-SET rules' which would determine margins and expense ratios for each year is rather like trying to make bricks without straw, because the supply of basic data is both scanty and unreliable, and usually not well adapted to our purposes. Our attempts are described in Appendix F, and this chapter does little more than reproduce the results and sketch some of the more important points in the argument.

THE PROCESS OF DISENTANGLEMENT

The procedure adopted had to vary between the different items, which must therefore be described separately.

Retail Gross Margins

On gross margins we have relatively firm figures for 1957, 1961 and 1966, derived from the Censuses of Distribution, and a less reliable (and less relevant) set from the 1950 Census. The 1966 figures are somewhat distorted, so far as our present purpose is concerned, by the introduction of SET in September.

It emerges fairly clearly from these figures that there was a modest upward trend in the percentage margin, and there is a good economic reason for this: on the whole, productivity can be expected to increase faster in the production of goods than in their distribution, especially when an increasingly affluent society expects to be offered a greater variety of goods from which to choose.

We might have proceeded with our task by saying that the data did not permit the establishment of any more sophisticated 'pre-SET rule' than this modest upward trend, and assumed that the figure in 1967-8 would have exceeded that for 1965-6 by the equivalent of two years' trend movement. However, economic reasoning suggested that we ought to examine the possible existence and size of systematic deviations from the trend, both so as to get a better estimate of the trend itself (by allowing for the census years being non-comparable in relation to the conjunctural factors influencing the margin) and also to allow for the difference in these conjunctural factors between 1965-6 and 1967-8.

To study this, we resorted to what might be called a 'simulation exercise', using figures from the National Income Blue Book. Our 'dummy' series seemed, by such tests as we could make, to be reasonably suitable for a study of deviations from trend,¹ and we reached two useful conclusions. Firstly, the deviations from trend did not seem to be very large in comparison with the trend when taken over a period of more than (say) four years, but were sufficiently important to exert a big influence when one is making a two-year comparison: and secondly, that a good part of these deviations could be 'explained' by reference to two factors—the year-to-year variations in the rise in prices of the goods concerned during the year in question, and the level of sales volume in the year compared with its neighbours. We did not find that any of the other factors examined did much to improve the statistical explanation of the deviations obtained by using these two factors.

¹ To avoid misunderstanding it may be emphasized that we made no use of the trend in the dummy series: we were concerned solely with deviations from it.

The economic reasoning which led us to try the 'differential price increase' as our first choice was simply that gross margins are usually calculated by assuming the cost of the goods sold in the year to be equal to the purchases in the year, *less* any increase in the *book-value* of the stock during the year. Gross margins thus include an element of 'stock appreciation', in any year when prices are rising: the retailer, who ends his year with the same physical stock as he had at the beginning, values the closing stocks more highly and subtracts the difference from the cost of his purchases—even though the *number* of articles bought was equal to the number sold. This stock appreciation is naturally biggest in years when prices rise at more than the average pace. We believed that in such years the gross margin in relation to replacement cost would be rather smaller than usual, because many prices are based on historical cost, but this practice is by no means universal (e.g. when averaging practices are adopted, sometimes including the prices on contracts for goods on order from manufacturers). We did not therefore expect the offset to be complete.

The economic *rationale* which led us to try the 'sales volume effect' as our second choice rested largely on the idea that when trade is good there will be fewer mark-downs to clear stock, and also a less aggressive policy of keeping regular prices down.

In each case the econometric results seemed to bear out our expectation—although we may, of course, have been 'right for the wrong reason'.

The Pre-SET Rules

The formal econometric equation which emerged from our investigations relates to the 'dummy' series, and as such is best left in Appendix F: it can not, of course, be used in that form for estimating actual margins. Appendix F also explains how we used the results to derive the 'pre-SET rules' to explain the movements in 'real life' gross margins.

Very briefly these rules¹ are as follows:

- (a) There is an upward trend in the margin of 0.35 percentage points each year.
- (b) In years when the percentage rise in prices exceeds the average (2.7 per cent per annum), there is an additional rise in the gross margin of 0.088 percentage points for every unit by which the percentage price increase exceeds 2.7 per cent; and correspondingly in years when prices rise less than 2.7 per cent, the increase in the gross margin is reduced by 0.088 percentage points for every unit by which the price increase falls short of 2.7 per cent.
- (c) In years when the volume of sales is above the four-year moving average (centred on that year), the gross margin is above trend by 0.19 percentage points for every 1 per cent by which sales are above average; and correspondingly, in years when the volume of sales is below the four-year moving average, the gross margin is below trend by 0.19 percentage points for every 1 per cent deficiency.

¹ The extent to which the introduction of the second and third rules (in their 'dummy form') improved the explanation of movements in our simulation series is shown in Appendix F. There is of course no way of testing how well the 'real life' rules would work, because we do not have an annual series for gross margins.

For purposes of estimating the movement in gross margins between 1965 and 1967 which would have been expected in the absence of SET (and other abnormal new factors), therefore, we add on two years' trend and then allow for the differences between 1965 and 1967 in respect of the price increase and the volume of sales effect.

Retail Net Margins

The Census of Distribution provides no data for net margins (i.e. net profit as a percentage of sales), because it did not ask for this information to be returned. However, the Blue Book gives figures for 'gross profits and other trading income' arising in the distributive trades, and we decided to extend our simulation exercise by using these figures to produce a series of dummy net margins, with which to study movements.¹ Details of the procedure are described in Appendix F.

The main conclusions from this exercise are fortunately more plausible than its somewhat speculative nature might lead one to expect. They are as follows:

- (a) There seems to be no trend in the ratio of net profit to retail sales over the period considered: this was in accordance with *a priori* expectations, since the reasons for expecting an upward trend of gross margins are related essentially to the expenses element, rather than to the net profit element.²
- (b) The figures for individual years show deviations from the average which represent quite a substantial percentage of the average. (We have no other means of judging their size except by reference to the average, since the figure itself has no economic significance: there is, of course, no trend movement with which the deviations can be compared, since there is no upward or downward trend.)

TABLE XIII.1 *Factors Determining 'Expected' Margins*

Factor	Nature of Pre-SET Rule	Percentage Points to be Added	
		Gross Margin	Net Margin
Trend	No. of percentage points to be added per year	0.35	—
Abnormal Price Increase	No. of percentage points to be added for every unit by which percentage price-rise exceeds 2.7	0.088	0.084
High Sales Volume	No. of percentage points to be added for every 1 per cent by which sales volume exceeds 4-year centred moving average	0.194	0.178

¹ The word 'gross' in the Blue Book title implies only that the profits are stated before any deduction for depreciation: they are relevant to a study of *net* margins, not gross margins—though not ideal for the purpose. (The definitions are given in the Blue Book and its supporting literature.)

² It is also in accord with the Inland Revenue statistics which we had hoped to use in place of the simulation exercise, but which we abandoned for reasons explained in Appendix F, after noting the absence of any trend.

- (c) A fair part of these deviations can be statistically explained by reference to the value for the year in question of the same two factors which explained the deviations in gross margin—as was indeed to be expected on economic grounds.

In quantitative terms the results of this analysis have been summarised in Table XIII.1, which also shows the results for gross margins.

It is interesting to note that for the price factor the regression coefficient came out almost exactly the same for net margins as it did for gross margins—i.e. our econometric analysis told us that in a year in which the price rise exceeds average by 1 percentage point we expect both gross and net margins to be raised (other things equal) by about 0.085 percentage points. This identity in the coefficients is what theory leads us to expect, if one attributes the result to the consequences of stock appreciation—but theory cannot tell us what the figure should be.

On the other hand the results for the sales volume effect do not accord so closely with expectations—though here the expectations are less clear-cut. The regression coefficients again came out very similar for gross margins and for net margins: in each case one is led to expect that, in a year when the sales volume is 1 per cent above the moving average, the margin will (other things equal) be raised by about .18 percentage points. Our prior expectation was that the coefficient would be rather greater for net margins, because these would benefit not only by the rise in gross margins, but also by the saving in expenses as a percentage of sales. A possible explanation might be that in such years there is an increase in such things as advertising (per £100 of sales) to offset the reduction in the ratios for personnel, rates etc.: but it is more probable that the key is in the uncertainty of our statistical procedure.

Expenses

The methods for estimating the effects of abnormal new factors on these are discussed in the next section, along with the results of applying them.

RESULTS FOR POST-SET YEARS

Gross and Net Margins

Table XIII.2 shows the movements in margins between 1965 and each of the years 1966 to 1968 which were to be 'expected' in the absence of abnormal new factors, on the basis of the rules. It also shows the actual movements, as derived from our samples, for the large retailers, the smaller retailers, and the two combined: these relate to comparisons of the most relevant financial years of the firms, which of course vary, but for the average, the discrepancy from the calendar year is only about one month.

The 'expected' movement applies logically to the whole retail trade, and should not strictly be used for either of our two categories taken separately. Even our 'combined figure' does not purport to cover the smallest retailers, but it is probably reasonable to say that the difference between the actual and 'expected' movements gives an indication of the effects of the abnormal new factors—together, of course, with all the various errors which can get into an analysis of this kind (errors in the basic data, effects of using an 'indicative' sample, uncertainties in the process of estimating what was to be 'expected', and so on).

It is apparent that in this part of the work our research has produced a more normal situation than on productivity—i.e. a set of results which does not lead to clear-cut conclusions. Thus the effects of the abnormal new factors on gross margins is shown as a rise in 1967, but a *fall* in the other two years—primarily because of the rising trend which we expected (essentially because the Censuses of Distribution showed one).

One important point is that the 'abnormal new factors' include the progressive demise of resale price maintenance, which tends to lower gross margins, whereas SET tends to raise them. *Both* tend however to reduce net margins, and here there is no doubt that the 'tendency' shows up as a reality in the table.

TABLE XIII.2 *Actual and Expected Movements in Gross and Net Margins for Retailers*

(All figures represent comparisons between 1965-6 and the year shown, and are in terms of percentage points)

	Movements in Gross Margins from 1965-6 to			Movements in Net Margins from 1965-6 to		
	1966-7	1967-8	1968-9	1966-7	1967-8	1968-9
<i>'Expected' Movements*</i> (on pre-SET rules)						
Trend Effect	+0.35	+0.70	+1.05	—	—	—
Abnormal price-rise	+0.05	-0.21	+0.20	+0.05	-0.20	+0.19
Abnormal sales level	+0.02	-0.05	+0.03	+0.01	-0.05	+0.03
Total 'Expected'	+0.42	+0.44	+1.28	+0.06	-0.25	+0.22
<i>Actual Movements</i>						
Large Retailers	+0.37	+0.71	+0.61	-0.46	-0.53	-0.72
Smaller Retailers	+0.09	+0.55	n.a.	-0.48	-0.59	n.a.
Combined figure	+0.28	+0.66	(+0.57)	-0.47	-0.55	(-0.75)
<i>Effects of Abnormal Factors (and Errors)</i>						
Combined figure	-0.14	+0.22	(-0.71)	-0.53	-0.30	(-0.97)

* These are based on calendar years, but are taken as applicable to the movements between the firms' financial years.

Note:

SET as a percentage of sales was:

	1966-7	1967-8	1968-9
Large Retailers	0.35	0.80	0.91
Smaller Retailers	0.28	0.55	n.a.
Combined figure	0.33	0.72	(0.83)

Further discussion of the figures is best left until we have examined the effects of the abnormal new factors on expenses, and can consider the whole picture in the light of tests on its reliability.

Expenses

Abnormal new factors have produced one effect on expenses which is clear-cut—the payment of SET. The amount of this has of course been kept down somewhat by the saving in labour used per £100 of sales, but we can take our actual results (given beneath Table XIII.2) as measuring the effect of SET on this item of expenses. There is no problem of distinguishing the historical record from 'effects'.

Payroll

For payroll, other than SET, we can make use of our productivity analysis. Table XI.1 showed, for example, a 'saving' in 1967 of 3.16 per cent of the man-power (expressed in full-time-equivalent) which would otherwise have been employed (i.e. in the absence of abnormal new factors). A first approximation for the effects of these factors in 1967 is therefore obtained by looking at the historical record (Table VII.2) to find the *actual* percentage which payroll represented of sales (i.e. 12.56 per cent), and saying that in the absence of abnormal factors this would have been higher in the proportion 100 to 96.84 (i.e. 12.97 per cent). The effect of the abnormal new factors then emerges as a saving in payroll expenses (excluding SET) equal to 0.41 per cent of sales.

This first approximation makes no allowance for the effects of the abnormal new factors *either* on the general level of pay-scales in distribution *or* on the average grading of the employees in relation to those scales.

As regards the first, we should report that a number of retailers told us that the need to pay SET reduced the amount which they could afford to offer to their employees. This might be taken as relevant, but we believe that its influence on the general level of pay-scales is negligible: any influence which it may have had should probably be considered as affecting the grade of employee hired.

On this second aspect we shall see in Chapter XIV that there has been some slight tendency to replace males by females and juveniles by adults, and a number of retailers claim to have concentrated on raising the proportion of skilled employees (so as to reduce the number of employees and save on SET). However the various factors influence the average remuneration per full-time-equivalent worker in different directions and none of them seems to be large: we decided, therefore, to be content with our first approximation.¹

Expenses other than payroll

We have found it impossible to do any econometric analysis which is relevant to expenses other than payroll. Table VII.4 gives the historical record, which shows a significant increase since 1965-6 in this item as a percentage of sales, both for large retailers and for the smaller ones. The best provisional assumption seems to be that this rise is 'about what would have taken place anyhow', since there are no obvious reasons why SET (or for that matter the end of RPM) should have had any marked influence on these expenses. They may well, however, have had some slight tendency to *raise* them through additions to the costs of services bought, including building repairs, or through the substitution

¹ This does not of course mean assuming that there was no wage-drift—merely that SET etc. had no impact on it. (As explained in Appendix E, we assumed varying amounts of wage-drift in each of the three years in estimating the movements of man-power to arrive at the productivity change shown by our sample.)

of 'devices' for labour, and to *lower* them through the general pressure of the profit squeeze. We clearly cannot be dogmatic about putting the effects at zero.

Table XIII.3 sums up this rather messy review of the expenses side for our two sets of retailers taken together.

TABLE XIII.3 *Actual and Expected Expense Ratios for Retailing**
(All figures are percentages of sales)

	1965-6	1966-7	1967-8	1968-9
<hr/>				
<i>Actual Expense Ratios</i>				
SET	0	0.33	0.72	0.83
Payroll	12.38	12.63	12.56	12.47
Other expenses†	6.97	7.14	7.27	7.35
	<hr/>			
Total Expenses†	19.35	20.10	20.55	20.65
	<hr/>			
<i>Expected Expense Ratios</i>				
SET		0	0	0
Payroll		12.84	12.97	13.11
Other Expenses†		(7.14)	(7.27)	(7.35)
	<hr/>			
Total Expenses†		19.98	20.24	20.46
	<hr/>			
<i>Effects of Abnormal Factors (and errors)</i>				
SET		+0.33	+0.72	+0.83
Payroll		-0.21	-0.41	-0.64
Other Expenses†		(0)	(0)	(0)
	<hr/>			
Total Expenses†		+0.12	+0.31	+0.19
	<hr/>			

* The figures relate to the combined figures for large retailers and smaller retailers.

† Other expenses (and hence the total) exclude rent and interest; it is assumed for the purpose of this table that the effects of abnormal new factors on 'other expenses' is negligible.

RELIABILITY OF THE RESULTS

As we have, after a fashion, covered all the items of the trading account, there is first of all an internal consistency test which can be applied. A great deal might be written about the meaning and significance of this test, but its actual operation is simple.

Very briefly, we have arrived, with greater or less conviction, at an 'expected' value for each item in each year, and have then assessed the effects of abnormal new factors on that item by comparing the expected with the actual figure for that year. Ideally, the 'expected' figures should conform to the same identity as the actual figures, i.e. that gross margin should equal expenses plus net margin; if so, then the 'effects' would also conform to this identity. We cannot of course hope that things will work out perfectly, however, since the econometric 'expectations' are all subject to a margin of uncertainty, and are done

independently: there is no automatic force making the errors cancel out. Nevertheless one wants to see how nearly consistent the answers are: as we are interested in 'effects', it is natural to set out the results in terms of these.

Table XIII.4 sets out our results, then, for each year, expressing the figures in the way which makes them seem most meaningful. The final row gives the combination of the results which would be zero in each year if the results were fully consistent.

TABLE XIII.4 *Consistency Test on Estimated Effects of Abnormal New Factors for Retailers*
(All figures are percentages of sales)

Item	1966-7	1967-8	1968-9
1. Additional Gross Margin (against 'expected')	-0.14	+0.22	-0.71
2. Payment of SET	0.33	0.72	0.83
3. Saving in payroll (excluding SET) through greater productivity	0.21	0.41	0.64
4. Effect on other expenditure	(0)	(0)	(0)
5. Effect on net margin	-0.53	-0.30	-0.97
Residual error (1-2+3-4-5)	+0.27	+0.21	+0.07

In view of the hazardous nature of the statistical exercise, we were frankly amazed to find that the residuals were so small. Indeed the fact that they are as small as they are, rather than two or three times as big, is largely a matter of good fortune: it is naturally comforting, but it has little real significance.

Lessons from the Consistency Test

This last point deserves a little elaboration. One might of course simply say that the residual is only about 0.2 per cent on sales, and that it is rather remarkable to have got as near as that. It is helpful however to go a bit further, and for this purpose we use the average of the figures for 1967-8 and 1968-9 to make the point. On the average of those two years the sum total of the figures to be tested for consistency, taken without regard to sign, is 2.40, and the average residual is 0.14. The residual would therefore be eliminated entirely if each of the figures was moved in the right direction by some 6 per cent—i.e. if the average 'effect on net margin', for example, were changed from -0.63 to -0.59. This in turn would be produced by a change in the 'expected' net profit from 6.45 per cent to 6.41 per cent and we certainly cannot expect to work to such fine limits.¹

At the same time one must not exaggerate the degree of reassurance which this consistency test gives. Admittedly it shows that the residual could be eliminated by very small changes in the 'effects' figures, but this smallness does not put any limit on the size which the errors *might* have: they *could* be enormous, and just happen to cancel out, so that the test shows no residual.

¹ One simple (if rather unduly flattering) way of putting the point is as follows. We have arrived independently at 'expected' figures for gross margins, expenses and net margins. The difference between the gross margin figure and the sum of the others averages 0.14 percentage points in each year, which is only a little over $\frac{1}{4}$ per cent of the figures being compared.

This is why, in a sense, the test is one in which no extra marks are obtained for getting a residual below (say) 0.5, and not many for getting a residual below (say) 1.0: if the residual is greater than 1.0 one *knows* that there are serious errors, but a lower figure still leaves the existence of serious errors as *possible*, and the likelihood of their existence does not decrease much as the residual falls.

In one respect the residuals in Table XIII.4 suggest that there might be room for improvement in our procedures, although it is straining things to try to make inferences from such small figures: the fact that they are *all positive* suggests that there might be some factor which we ought to have brought into the picture, or which we have consistently under- or over-estimated. We therefore looked at the items one by one, to see whether there was good reason for making a change in the 'helpful' direction; it was however difficult to make a good case, as the following brief notes indicate.

Gross Margins. On gross margins it would be quite possible to argue that the 'expected' upward trend looks rather high, and that if it were reduced the figures for additional gross margins would seem more in conformity with one's ideas that the effect of SET would be to raise them above the level expected on previous experience. But such a move would be in the *wrong* direction—it would make the residuals bigger.

One could of course take the opposite line, and say that the upward trend should be *raised*: one could then argue that the resultant negative figures for gross margin are attributable to the ending of RPM. Apart however from the absence of any obvious statistical reason for raising the trend (which is fairly well founded on the Census of Distribution and seemed to us if anything higher than we had expected to find), this change would have three times as much effect on 1968–9 as on 1966–7, which is not as helpful as one might wish.

One point does however arise in relation to the figures which we have used for the *actual* movement in gross margins. The method which we adopted for combining the results of the reporting firms is described in Appendix B, but it is not really logical in relation to the six largest multiples, which did not receive a weight sufficient to reflect their own share in the trade: at the time when we decided on the method we thought that—in view of the limited and rather special objects of our enquiry—the gain in accuracy from applying a special system to them would not justify the additional complications.

With the aid of some 1966 Census of Distribution figures which were not then available we have now examined what effect such a re-weighting of these six firms would have on the 'actual' movements in gross and net margins, as used in Table XIII.2, and hence on the 'effects' figures in the bottom row. The results of this investigation are shown in Table XIII.5.

It is apparent that this re-weighting makes some difference to the answers, but these are only in the second place of decimals, and do not really change the character of the results. The effects of the SET–RPM combination come out as giving a rather smaller increase in gross margin (or a rather larger decrease) in each year, and the decreases shown for net margins are always a little smaller.

As it happens, both the above changes tend to reduce the residual discrepancies shown by the consistency test: the figures for the three years would become +0.23, +0.15 and –0.03 respectively. This is a comforting result, but as we explained above, we do not attach much importance to the size of the residuals once they are below about 0.5.

Payroll. A reduction in the 'saving' would contribute to the elimination of the residuals, and in Chapter XI we noted various reasons why the saving may have

TABLE XIII.5

*Effects of Re-Weighting Margin Figures
for Six Largest Retailers*

(All figures are in terms of percentage points and relate to our combined sample of retailers)

	Movements in Gross Margins from 1965-6 to			Movements in Net Margins from 1965-6 to		
	1966-7	1967-8	1968-9	1966-7	1967-8	1968-9
<i>Actual Movements</i>						
Before re-weighting	+0.28	+0.66	+0.57	-0.47	-0.55	-0.75
After re-weighting	+0.26	+0.62	+0.51	-0.45	-0.53	-0.71
<i>Effects of Abnormal Factors</i>						
Before re-weighting	-0.14	+0.22	-0.71	-0.53	-0.30	-0.97
After re-weighting	-0.16	+0.18	-0.77	-0.51	-0.28	-0.93

been somewhat exaggerated. As with gross margins, a change in the figures would have a very uneven impact on the three years; if it were big enough to eliminate the aggregate deficit—which seems highly unlikely—it would make the 1968-9 residual negative, whilst leaving 1966-7 positive. A small adjustment would however make the results look a little more respectable.

We may also have been wrong in dismissing the possible effect of the abnormal new factors in increasing the payroll, through influencing the average remuneration per full-time-equivalent worker: if the net effect were to raise this average, it would help to reduce the residuals. The difficulty with this is that the known effect (a slight shift to female labour) tells the other way, and one has to assume this was outweighed by an unquantified shift towards more skilled workers.

Other expenditure. Here, of course, anything is possible, but it seems clearly improper to make a formal change from our *presumption* of 'no effect' merely to make the figures balance.

It is nevertheless quite possible that the key to the consistently positive residual *does* lie here. Our method can only detect the combined effects of 'abnormal new factors', which should strictly be taken as including 'abnormally powerful working of old factors'. If, for example, local rates were rising markedly faster in the years since 1965 than they were in the years from 1954 to 1965, then this would—if we had done a proper calculation—have produced a consistently positive item as the effect of abnormal new factors, which would have reduced the residual.

Anything which one puts in on this score must, of course, be ignored when one tries to arrive at the effects of the SET-RPM combination alone.

Effect on Net Margin. Whilst the calculation of the 'expected' figures is a hazardous operation, the most important point—the assumption of zero trend—seems to conform both to economic logic and to two statistical approaches. The unexpected smallness of the regression coefficient for the sales effect which we noted above is, for these years, of little or no quantitative importance.

Conclusions from the Consistency Test

To sum up, then, our main conclusion from the consistency test was that we have exposed our results to an 'ordeal' which might have proved them to have serious errors, but signally failed to do so. On the other hand, the fact that we were not *proved* guilty of serious errors does not establish our innocence: the exercise is, strictly speaking, one in which you may lose, but cannot win.

Despite the smallness of the residuals, the test did give us a slight warning sign in the shape of their all having the same sign. After investigation, however, we concluded that this did not provide any adequate reason for disturbing the figures—which we were in any case reluctant to do, because there is positive advantage in taking the best estimate for each item separately, together with its own qualifications about possible bias: if the figures were constrained so as to fit exactly to a consistency test some at least might be moved in the wrong direction. We do not even think that, in using the separate figures, one should introduce a presumption from this test that the errors are more likely to be in the direction which would reduce the residual, rather than the other:¹ for those who find such a view illogical, one can offer the let-out that the 'other expenditure' effect (which clearly cannot be used for any purpose) may be regarded as more likely to be positive than negative.

One particular application of the above principle is of importance. It is perhaps natural to argue that the effects of abnormal factors on net margins should be found by estimating the effects on gross margins and on expenses, and arriving at the effect on net margins as the difference between these: this is equivalent to saying that the whole residual should be regarded as an error in the net margin figure, and we must say firmly that such an assumption is quite unjustified. The effect on net margins stands on all fours with the other items: it has been separately estimated by the best methods which we could devise. Like all our results, it is subject to a margin of uncertainty, but the figures shown remain our best estimates, after considering all the data, including the consistency test.

COMMENTS ON THE FIGURES

It is time to consider what the basic results—as given in Tables XIII.2 and XIII.3—tell us about the effects of SET and other abnormal factors. The answers are, unfortunately, less clear-cut than one would wish: the fact that this is a normal result of economic research may bring some professional consolation to the investigator, but does not alter the fact that a range of possible interpretations is open.

Gross Margins

On gross margins the fact that the estimated effect comes out negative in two years seems to show clearly that some other important new factor besides SET was operating, and this we regard as being primarily the progressive ending of resale price maintenance. A further possibility—which is not in conflict with the RPM hypothesis—is that the Prices and Incomes policy has

¹ An exception ought perhaps to be made for the consequences of re-weighting on the estimated effects on gross and net margins. These really amount to the correction of an error in calculation, and our best estimates should really be revised to the figures shown in Table XIII.5; we refrain from formally making these small changes mainly to preserve consistency with figures elsewhere in the Report.

helped to hold margins down, whether by control or through voluntary adherence. This view gains added support from the statistical consideration that past experience led us to 'expect' margins to rise through time: this means that the mere *keeping constant* of a margin is sufficient to make our 'effect' come out negative.

It would obviously be desirable to assess whether SET by itself would have had a big upward effect, which was offset by a big RPM effect, or whether both were rather small. We hope to be able to do further work on this when we have considered the position in other service trades, in which RPM is not relevant. For the present we do not think it useful to publish the scrappy impressions which we have derived from a study of the varying experience of the separate trades, in which the ending of RPM acted with differing force and at different dates.

We would like to be able to say more about the fact that the results differ substantially between the years 1967-8 and 1968-9: in particular it seems odd that margins appear to have been raised above the expected level in 1967-8, but reduced below it in 1968-9, when the rate of SET was (on average) rather higher. It seems clear that the ending of RPM was more important in the later year, when more goods were affected, and this would contribute to the result: so would the holding of some margins at a constant level under the Prices and Incomes policy, and a general pressure to follow historical cost pricing after devaluation and the increases in indirect taxes (which may have at least partially negated the expected 'price-increase effect' shown in Table XIII.2).

We feel however bound to add a warning against pressing our figures too far, even when the consistency tests came out so satisfactorily: to some extent it is better to take the results for the two years 1967-8 and 1968-9 together, and say that if anything the abnormal new factors led gross margins to be slightly lower than was to be expected on pre-SET experience.

Expenses

The important point here is obviously that the progressive gain in productivity (relative to 'expectations') has gone a good way towards offsetting the cost of SET to the retailer. The 1968-9 figures include a period (averaging perhaps four or five months) in which SET was at the higher rate introduced in September 1968, but even if there had been no increase the saving on payroll would not have balanced the whole SET payment.

In view of the danger of statistical errors for individual years there is something to be said for the view that the last two years should be looked at together, as in the case of gross margins. It is however entirely reasonable on general grounds to believe that the saving was greater in 1968-9, owing to the inevitable lags which are involved in introducing such schemes as conversions to self-service.

Net Margins

There need be no surprise that the effects of the abnormal new factors on net margins has been to reduce them in all three years: both SET and the ending of RPM are clearly tending in that direction. It is a bit surprising to see such a marked increase in the effect between 1967-8 and 1968-9, but of course SET was at a higher rate after September and RPM had ended on more goods. There

is also the statistical point noted above in connection with gross margins: our statistical 'expectations' about profits in 1968-9 were raised, because it was a year of sharply rising prices, and this 'expectation' might have been frustrated by pressures to follow a strict policy of historical cost pricing.

It is important to put the effects on net margins into perspective. In 1968-9 the 'expected' net margin was 6.7 per cent and the abnormal factors reduced this by one-seventh to 5.7 per cent. As those figures are based on net profits before rent and interest, the proportionate reduction for a tenant with a large bank loan would be a good deal steeper.¹

Because the obvious abnormal factors were all tending to *reduce* profits relatively to expectations, it is particularly difficult to assess their relative importance. If we are later able to arrive at any such assessment for gross margins, however, we will be able to make plausible inferences about their relative importance for net margins.

WHOLESALEING

It would obviously be desirable to repeat for wholesaling everything which we have done for retailing, but unfortunately we found no pre-SET data on which to base an econometric analysis for either gross or net margins. In particular, there is nothing equivalent to the Census of Distribution data for retail gross margins in 1957 and 1961, on which to base an estimate for the trend movement; and our simulation procedure could not be used to produce a separate study of deviations about the trend in either type of margin.

Under these circumstances we have to examine how far our information does carry us, and to see what we can add on the basis of reasonable assumptions—including especially the assumption that various things behave similarly in traditional wholesaling and in retailing.

Payroll and SET in Wholesaling

On these two items we can apply the same techniques and data as in retailing, and the results are set out in Table XIII.6. One must of course recognise that our sample did not cover all types of traditional wholesaling, so that the applicability of the over-all productivity effect to it is subject to a margin of error.

TABLE XIII.6 *Effects of Abnormal New Factors on Payroll
Costs in Traditional Wholesaling*
(All figures are percentages of sales)

Item	1966-7	1967-8	1968-9
SET Payments	0.15	0.31	0.34
Saving in payroll (excluding SET) through greater productivity	0.11	0.30	0.32
Net 'Effect' on payroll cost (including SET)	0.04	0.01	0.02

The general picture is clearly very similar to that which emerged in retailing, 'only more so': the productivity gain virtually paid for SET in 1967-8 as well as 1968-9. This reflects the fact that our productivity analysis showed the gain

¹ See the final section of Chapter VIII for a related discussion about profits on capital.

as being rather larger and coming rather quicker in wholesaling, but in view of the inevitable uncertainties of the results we did not feel able to attach much importance to that feature.

Net Margins

Although we have no proper econometric analysis on which to base 'expectations', we have fair reason to assume that there was no significant trend in pre-SET years. Thus the Inland Revenue series for wholesaling, which we had hoped to use as the mainstay of our analysis, showed no trend; there is no economic reason to expect a trend; and the fact that our dummy series for distribution as a whole (described in Appendix F) showed no trend provides some evidence in favour of assuming no trend in wholesaling as well as in retailing.

This assumption narrows the issues a great deal. It enables us to set out the data on the lines used in Table XIII.7, which shows the consequence of also assuming that the conjunctural factors have the same *proportional* effect on net margins in wholesaling as in retailing.

TABLE XIII.7 *Effects of Abnormal New Factors on Net Margins
in Traditional Wholesaling*
(All figures are percentages of sales)

Item	1965-6	1966-7	1967-8	1968-9
1. Actual net margin (before rent and interest)	2.11	1.84	1.85	2.00
2. Changes from 1965-6 level	—	-0.27	-0.26	-0.11
3. 'Expected' changes on account of:				
(a) Trend	—	0	0	0
(b) Differences in conjunctural factors ¹	—	0.02	-0.08	0.07
4. Estimated 'effect' of abnormal new factors (2-3)	—	-0.29	-0.18	-0.18

¹ Assumed to be the same proportion of the 1965-6 figure as for retailing.

It will be seen that the allowances for changes in conjunctural factors make, on the average of the years, very little difference, and this is also true for the last two—which are the interesting ones. Consequently it makes little difference whether one includes them or whether one uses a straight comparison with 1965-6, so far as the over-all picture is concerned: in either case one sees net margins in the two-year period some 9 per cent lower than was 'expected'.

The vulnerable spot in this analysis is the use of a single base year (1965-6) when one does not have a proper method of allowing for changes in conjunctural factors, which *might* operate in some quite different way from that which we have assumed.

Gross Margins and Other Expenses

Here we have little to offer beyond the 'actual' figures derived from our sample, which are reproduced in Table XIII.8. We have however added some 'expected' figures for gross margins, based on the assumption that the pre-SET upward trend was the same proportion of the 1965-6 gross margin as in retailing and that the conjunctural factors had the same proportional effects. These seemed.

on the whole, the most plausible assumptions to make in the absence of anything better, but general economic reasoning does not really do more than suggest a *similarity in broad pattern*, leaving a wide range open for differences in detail.

TABLE XIII.8 *Effects of Abnormal New Factors on Gross Margins and Non-Payroll Expense Ratio in Traditional Wholesaling*
(All figures are percentages of sales)

Item	1965-6	1966-7	1967-8	1968-9
<i>Gross Margins</i>				
1. Actual gross margin	10.82	10.82	11.09	11.31
2. Change from 1965-6 level		0.00	0.27	0.50
3. 'Expected' changes ¹ on account of:				
(a) Trend		0.14	0.28	0.42
(b) Differences in conjunctural factors		0.03	-0.11	0.10
4. Estimated effect of abnormal new factors (2-3)		-0.17	0.10	-0.02
<i>Non-Payroll Expenses</i> (before rent and interest)				
5. Actual ratio	3.20	3.25	3.36	3.39
6. Difference from 1965-6		0.05	0.16	0.19

¹ Assumed to be the same proportion of the 1965-6 figure as for retailing.

The importance of the assumed trend is obvious; so, in a different way, is the rise in the 'actual' ratio for other expenses. Before commenting further, however, it is clearly wise to apply the consistency test.

The Consistency Test

Table XIII.9 shows the consistency test for traditional wholesaling in the same form as was given for retailing in table XIII.4.

TABLE XIII.9 *Consistency Test on Estimated Effects of Abnormal New Factors in Traditional Wholesaling*
(All figures are percentages of sales)

Item	1966-7	1967-8	1968-9
1. Additional gross margin	-0.17	0.10	-0.02
2. Payment of SET	0.15	0.31	0.34
3. Saving in payroll through greater productivity	0.11	0.30	0.32
4. Effect on other expenditure	? 0	? 0	? 0
5. Effect on net margin	-0.29	-0.18	-0.18
Residual error (1-2+3-4-5)	+0.08	+0.27	+0.14

The residuals are not as satisfactory as in the case of retailing, having regard to the smaller size of the figures from which they are derived: they are however a good deal better than the flimsy basis that some of the figures led us to expect.

Since the basis for some of the figures is flimsy, it is more appropriate to examine what types of change in assumptions would, or would not, improve the balance.

First, the position would get very much *worse* if one omitted the assumption about an upward trend in gross margin: the residual in 1968-9 would go up from 0.14 to 0.56. It would on the other hand be improved if the trend were put higher, but such data as we got from Trade Associations would if anything suggest a smaller trend.

Secondly, if one takes the last two years together the assumptions about conjunctural factors on both gross and net margins virtually cancel out, so that the test provides no grounds for changing them. Moreover, so long as the assumptions are retained for both gross and net margins, they have very little net effect on the residual for any year taken in isolation, because they tell in opposite directions.

Thirdly, it would—as in retailing—improve the balance if one assumed that we had over-estimated the gain in productivity. Apart from that we can only say that our method of analysis was more uncertain in wholesaling, because of the weakness of the pre-SET output data, but this gave no reason to expect errors to be in one direction rather than another, and we doubt whether the consistency test provides a real reason to change the figures.

Finally, it would—as in retailing—greatly improve the position if one could justifiably assume that some of the increase in the ratio for other expenditure was due to abnormal new factors, rather than being something ‘which would have happened anyhow’. If the *whole* of the increases compared with 1965-6 were attributed in this way, the aggregate discrepancy for the three years would be reduced from +0.49 to +0.09, and the balance would be greatly improved for each year separately.

We do not feel that these considerations really justify any change in the figures.

GENERAL VIEW OF THE RESULTS

The conclusion from the last section seems to be, therefore, that if we consider the results in rather broad terms, then the picture which we built up for retailing probably applies to traditional wholesaling also—a result which has some *a priori* plausibility. Since all our statistical analysis is subject to the uncertainties which inevitably arise when one is straining the data to the limit in studying fine differences, it seems wise to state our conclusions about the combined field in rather broader terms than the apparent precision of the figuring might seem to make possible: as we have provided the results of the calculations in full detail, it is open to anyone who wishes to set out the conclusions with greater apparent precision, but this section represents as much as we feel reasonably entitled to conclude—and even so the results represent probabilities, not certainties.

First, then, we must emphasize the point which became progressively clearer to us as our work proceeded: we are dealing with the combined effects of SET and of the progressive ending of resale price maintenance (to which we might also add some ‘Prices and Incomes’ influence). We may later feel able to say something about the division between these two factors, but in these conclusions we attempt no such separation.

Secondly, we feel it best to draw on the combined results of 1967-8 and 1968-9 so as to make a broad statement which might perhaps be regarded as applicable to the second year of SET (ending in September 1968), in which

SET was at 25s. per week for a man. We are covering retailing and traditional wholesaling in a single statement.

On this basis, we set out our conclusions as follows:

- (a) Gross margins were higher than before the introduction of SET, but the average rise was if anything rather smaller than one would have expected on the basis of past experience, in a year with the volume of trade actually experienced and with suppliers' prices of consumer goods moving as they did.

To put this another way, in conditions of progressive ending of RPM the distributors *as a whole* did not make any recovery from the consumers, to set against the cost of SET, and indeed probably received *less* in the way of gross margins than was to be expected on past experience.

This outcome was the result of different experiences in different trades, some of which received a considerably smaller gross margin than would have been expected in the absence of abnormal new factors—presumably because the ending of RPM had a large effect on them.

- (b) The volume of sales per person engaged in distribution (reckoned in terms of full-time-equivalents) showed a considerably greater rise compared with 1965–6 than past experience would have led us to expect, in a year with the volume of sales and the state of the labour market as they actually were. This abnormal increase in productivity led to a saving on payroll costs which, in the trade as a whole, went a long way towards covering the cost of SET.
- (c) The distributors earned a net profit (before rent, interest or taxation) which represented a decidedly lower percentage of sales than prevailed before the introduction of SET. Allowing for the movement which one would have expected in view of the conjunctural factors, the combined effect of SET and the RPM changes was to lower profits (on average) by the equivalent of more than half the cost of SET.

CHAPTER XIV FURTHER EFFECTS OF SET ON RETAILING

The last three chapters have dealt with the main effects of SET,¹ taken in a rather coldly statistical sense: they have made little reference to the ways in which the results—higher productivity, lower net profits on sales etc.—were produced, or to the incidental by-products of the process, which may be of more importance to many people than the things which appear in the main statistics.

The object of this chapter and the next three is to make the picture more complete by adding some of these details to the bare overall statistics. The first two chapters deal with a somewhat heterogeneous set of topics in the fields of retailing and wholesaling respectively, the common link being simply that they are the consequences of a tax which made labour more expensive and led to a profit squeeze; the next two examine various *anomalies*, arising from the way in which the tax operates.

Two general points may usefully be borne in mind in reading this chapter and the next:

(a) In the main, the information which we collected represents the historical record of what happened in the period, rather than the effects of SET as such, and there are usually no statistical devices for disentangling the latter. We did our best, particularly in interviews, to find out from our informants how far SET was important in leading to certain decisions, but this served largely to bring out the point (of which we were only too well aware) that decisions are made on the basis of a composite set of factors, so that the role of SET could not logically be disentangled. The general impression which we formed was that in a great many cases the decisions which were taken would have been sensible even in the absence of SET, and that its role was to *accelerate* a process which would otherwise have taken longer to be implemented. This does not mean, of course, that the enterprise reached in one year a position which it would otherwise have reached three years later, and that it would then 'rest' for two years: the 'shock' effect of SET in precipitating quick changes doubtless put the enterprises in a position to consider further changes in years two and three, with the benefit of experience already gained—but we could not pursue the story beyond the early effects.

(b) On the whole, the changes which we found to have taken place in the first two years or so after the announcement of SET were smaller than one might have expected on the basis of a theoretical analysis of what the changed conditions might induce. There were frequently good practical reasons for this rather small (or perhaps 'slow') reaction: some of these will emerge in the discussion of the individual topics, but one general point can usefully be made here, to avoid repetition in each section. This is, in brief, that the introduction of SET was not a single disturbing force introduced into an otherwise static situation,

¹ In this chapter we again use the phrases 'SET effect' or 'effects of SET' as shorthand for the 'effects of SET and other abnormal new factors'—which in practice means that it covers also the effects of the progressive ending of resale price maintenance.

but rather one of a continuing stream of changes which affected the conditions under which the distributors were operating: in consequence, adjustments to SET had to be part of a continuing process of adjustments to events of many kinds (including, in some cases, a radical change in the position on resale price maintenance). Moreover, it was emphasised to us on several occasions that traders were in considerable doubt about how to react to SET, because they were uncertain about whether its form would be changed (e.g. in relation to the amount payable for part-timers), or whether it might be completely abolished before the benefits of some action taken in response to it had outweighed the costs involved in taking that action. The importance of these 'costs of adaptation' has to be thought of in terms of claims on managerial time, as well as the cash outgoings for adapting fixtures or installing machinery, the loss of customers' goodwill during alterations, the costs of recruiting full-timers to replace part-timers (or, soon after, part-timers to replace full-timers) etc.¹

This second factor perhaps helps to explain why the effect of SET was so largely to precipitate the quick taking of action which was already in contemplation, rather than the adoption of measures which were of a radically new character. The tendency for labour to become more expensive, relative to goods, was of long standing (see Chapter VII), and SET gave an upward jerk to this trend.

QUALITY OF SERVICE

In discussing the effect of SET on productivity, it was emphasised that the measures of output used took no account of any changes in the quality of service, and it is natural to ask whether the apparent rise in productivity may in part reflect deterioration in service. On the other hand, there is also the possibility that service was *improved* as a result of SET, where retailers attempted to meet the cost by attracting more business in that way. In this section we report our attempts to learn something about changes in the quality of service provided to the retail customer—but we must say frankly that our enquiry did not include a survey of consumers.

It should be emphasised first of all that 'quality of service' is something which has a great many dimensions. Apart from the question of the shop's location, there are such things as the range of goods from which one can choose, the speed with which one is served, the ability of assistants to advise about the quality of different goods, whether or not the shop will deliver (and in some cases install), whether it will accept cheques, whether it has a car park, the availability of ancillary services such as credit and servicing, and so on. In view of all these different dimensions, it was clearly impossible for us to hope to cover all the changes in the quality of service that might have taken place as a result of SET, and for this reason we shall concentrate on a few of the most important aspects. The spread of self-service and self-selection is discussed separately in the next section.

In the questionnaire, we asked firms whether they had changed their policy with regard to particular aspects of service since SET was introduced, and the

¹ It is perhaps worth adding that some traders explained that they had not adopted methods of avoiding SET which would be perfectly legal because they were afraid that a change in the rules might nullify the advantage before the costs (taken in this wide sense) had been recouped.

results of these questions for large and small retailers are summarised in Table XIV.1. The exact form of the questions put (and of others which are not reflected in the table) can be seen in the questionnaires which are reproduced in Appendix B. It should be emphasised that we asked only for the historical record, and the changes reported were not wholly attributable to SET.

TABLE XIV.1 *Changes in Policy with Regard to Service since March 1966 for Retailers*

Comparing the first half of 1968 with the first half of 1966, have you changed your policy in any of the following ways?

		All figures are percentages	
		Large retailers	Smaller retailers
(a) Narrowed the selection offered for each category of good?			
Yes, to a considerable extent	7	} 12	88
Yes, slightly	69		
No	24		
(b) Altered the availability of counter-staff (in proportion to volume of business)?			
Fewer	49	}	Not asked
No change	48		
No answer	3		
(c) Delivery?			
Reduction in service ¹	38		21
No change	62		79
(d) Credit to customers?			
Less	39		16
No change	61		84
(e) Advertising? (as a percentage of turnover)			
More	23		5
Less	27		20
No change	50		74
(f) Display?			
More	27	}	Not asked
Less	11		
No change	62		
(g) After-sales service and advice to customers?			
More	8		3
Less ¹	1		11
No change	90		87

¹ Including introduction or increase of charges

Note:

The full questionnaires are reproduced in Appendix B.

We may begin by discussing the most obvious aspects of service—the selection of goods offered and the availability of counter staff. Of the large retailers, three-quarters answered that they had pursued a general policy of narrowing the selection offered for each category of goods. However, in nearly all of these cases the narrowing was only ‘slight’. In the case of the availability of staff (in relation to the volume of business), half of the large retailers said that they had changed their policy in the period March 1966 to March 1968 in the direction of fewer counter staff (in proportion to the volume of business)—the remainder having made no change in their policy. This was particularly the case with co-ops (all but one of which had reduced staff-availability) and department stores (sixteen out of twenty-six).¹ Discussion with the respondents in the interviews suggested, however, that while there were undoubtedly cases where this had led to a reduction in the quality of service, there were a number of firms where the reduction in staff reflected a change in the method of operation (such as a switch to more open display) and in these cases service might even have improved.

Turning to the other aspects of service (lines three and four in Table XIV.1), the general picture is one of relatively little change in the level of service offered (and this is true also of the questions which we have not reflected in the table). In each case over half of the firms had made no alteration in their policy since 1966—for example just under three-quarters had made no change in their policy with regard to delivery or credit given to customers. Moreover, in those cases where policy had changed it was not necessarily in the direction of a reduction in quality of service: in the case of advertising and display by large retailers, a sizeable proportion had *increased* the service provided.

The absence of any change in policy with regard to service is particularly marked in the case of the smaller retailers: a somewhat dramatic summary of the attitude of some of these was that they competed with the multiples on the basis of service, and it would be ‘suicide’ to lower their standards.

As pointed out above, our questions did not exhaust the possibilities for change in service provided. We did, however, invite firms to describe any other major changes in the character of service that had taken place. Only nine large firms responded to this invitation by listing other changes (a number of others commented on the introduction of self-service or other aspects not covered here). Some of these nine firms listed changes which represented a reduction in service (such as increased workroom charges and reduction in acceptance of telephone orders), but others had made changes which were clearly an improvement in service (e.g. ‘more and better car parking’, ‘more packers at checkouts’, and ‘staff training has been increased to improve customer relations’).

Role of SET

We have described above the main changes in the quality of service that we found to have taken place, but these changes cannot necessarily be attributed to SET. Clearly changes would have taken place in any event. For example, we would expect rising interest rates to have led to a reduction in the credit extended or to a rise in the charges for credit; we would also expect there to be a long-run trend towards reducing the delivery services provided and to the

¹ It is interesting to note that the rise in the volume of sales per man in the sixteen department stores whose policy changed rose by an average of 8.0 per cent between 1965–6 and 1967–8, against an average rise of 5.4 per cent for the other 10.

greater provision of car-parking space. In the interviews we attempted to explore the influence that SET might have had on changes in policy with regard to service. This exploration was necessarily very limited—not only because of our limited resources and the limited patience of our respondents, but also because of the serious difficulties involved in trying to disentangle the influence of SET on a decision in which a number of considerations were important.

It seems fair, however, to record our general impression that the effect of SET in leading to a decline in the quality of service was small. The one possible exception concerned the availability of counter-staff in relation to sales, where it appeared that a number of firms (particularly co-ops) had reacted to SET by cutting down on counter-staff, but even in this case the deterioration was frequently offset by changed methods of operation.¹

CHANGES IN METHODS OF WORKING

SET raised the cost of labour relative to that of most other inputs, so that one might expect a shift of methods to ones which use (for example) office machinery in place of manpower, whilst leaving the customer virtually unaffected.

More importantly, as between two methods which offer a different service to the customer, the cost of an 'elaborate' type of service (i.e. one which uses more labour per article sold) was raised in relation to that of a 'simple' type: as there is no increase in the differential advantages of the former to the customer, and so in its power to attract business, one could expect a switch from the 'elaborate' to the 'simple' type of service.²

This section examines some of the changes in methods of working and the possible influence of SET. For two reasons the incentive to change has been less than one might expect. Firstly, SET applies to building work (though its cost should rise by less than that of retailers' labour, because of the materials element). Secondly, in January 1966 investment allowances for plant and machinery (for which the distributive trades were eligible) were abolished and replaced by investment grants, for which retailers and wholesalers do not qualify except for the purchase of computers.³ The former point is relevant to the 'effects' of SET, the latter is not—but it affects the historical record.

Self-Service and Self-Selection

The pre-SET movement in the direction of self-service may be illustrated by a few figures. Comparison of the Censuses of Distribution in 1957 and 1961 shows that the share of self-service shops in total sales rose from 3 per cent to 6 per cent; the 1966 Census results are not yet available, but will show a further

¹ Looking at the matter from the other end, we examined the forms for the large retailers who showed a fall between 1965–6 and 1967–8 of more than 5 per cent in their payroll/sales ratio—whom we can regard as the 'success cases' for this purpose, since the average movement was a small rise, and no trade showed a fall, on average, of more than 2.4 per cent. By no means all of the 'success cases' had reported a policy of reducing counter-staff in relation to the volume of sales: the proportions were:

For 18 success cases	60 per cent
For the other 103 large retailers	47 per cent

² More realistically, since the trend to self-service and self-selection was already visible, one could expect its pace to be accelerated. (As explained earlier, these forms of service offer different advantages to counter-service, and should not be considered 'inferior'.)

³ The impact of investment incentives on capital expenditure decisions in retailing was examined in an earlier study by the Department, published as Occasional Paper 16, *Productivity and Capital Expenditure in Retailing*, by K. D. George.

big rise. If we take shops which are not only self-service but also qualify as supermarkets according to the definition of the Self-service and Supermarket Directory (i.e. have at least 2,000 square feet of floor space, at least three check-outs, and sell all requirements for a normal week's household shopping), then their number had grown from 175 in 1958 to 2,500 in 1966. This means that in examining the influence of SET we must look not just for cases where firms have introduced self-service, but for signs that SET has led to an *acceleration* of the trend to self-service—and similarly for self-selection.

In general, an acceleration of this kind can only be assessed by comparing complete Censuses (or a series of sample surveys which can be grossed up to give a complete picture): it is not meaningful to ask the owner of a single small shop whether he has accelerated his movement towards self-service or self-selection since the introduction of SET. However, one can learn something useful by putting such a question to the members of our 'large retailer' panel, because typically the process is a very long-drawn-out affair in their case: multiple retailers convert a varying number of shops each year, or build a varying number of large self-service stores to replace old ones; department stores apply self-selection to a varying number of new departments; and so on.

With some trepidation, however, we decided in this instance to go further, and ask directly for 'the effects of SET' rather than 'the historical record'. The latter would not have been easy to secure in statistical form, and would have been of little use without some method of disentangling the SET effect, because (for example) a previous programme might have been reaching a climax, or the scope left for conversion might have become very small by 1966. On the positive side, we felt that it was reasonable to ask whether SET had had an effect on a major *policy*, even though the effect could not be quantified at all easily.

The results are summarised in Table XIV.2. In the case of self-selection, half the firms said that SET had led them to accelerate their plans to introduce it or to increase the number of departments with it. This was particularly the case with department stores (twenty out of twenty six), co-ops (nine out of sixteen) and clothing firms (ten out of nineteen).

When we turn to self-service, then a much smaller proportion reported any effect of SET on their plans—only 16 per cent in all. The only trade where this was of any importance was among co-ops, seven out of sixteen reporting that it had accelerated their plans to introduce self-service.

In the case of smaller retailers it was not, as explained above, meaningful to ask questions about *policy*, but we did ask whether they were making more use of self-selection or self-service in their shop than they were when SET was introduced. About 18 per cent reported some increase.

One of the interesting features of the results shown in Table XIV.2 is that very few of the firms in the food trade reported any influence of SET on their plans to introduce self-service or self-selection. This point was one which we explored further in our interviews with firms in the trade. The interviews confirmed this finding, although the amount of self-service space had been greatly increased. In particular we were told quite categorically by a number of leading supermarket operators that SET had had no impact on their plans whatsoever: the development of supermarkets was a long-standing policy which was not influenced by a relatively small addition to labour costs.

TABLE XIV.2 *Effect of SET on Plans to Introduce Self-Service
or Self-Selection for Large Retailers*

(1) Has SET led you to accelerate your plans to introduce more self-selection?

Trade	Number of Firms	Percentage Answering		
		Yes	No	No answer/ Not applicable
Department Stores	26	77	23	—
Cooperative Societies	16	56	38	6
Food	12	25	67	8
Confectioners/Tobacconists/Newsagents	7	43	43	14
Clothing and Footwear	19	53	42	5
Household Goods	19	26	58	16
Miscellaneous	11	36	64	—
All Trades	110	49	45	6

(2) Has SET led you to accelerate your plans to convert departments or whole shops to self-service?

Trade	Number of Firms	Percentage Answering		
		Yes	No	No answer/ Not applicable
Department Stores	26	19	77	4
Cooperative Societies	16	44	56	—
Food	12	8	84	8
Confectioners/Tobacconists/Newsagents	7	14	72	14
Clothing and Footwear	19	16	79	5
Household Goods	19	—	84	16
Miscellaneous	11	9	91	—
All Trades	110	16	77	7

The interviews also brought out the importance of two further factors:

- (a) Where SET had been reported as having an effect on policy with regard to self-service or self-selection, it often emerged that this would have been profitable before SET, but that SET had provided the impetus to carry out the change. In other words, it was the 'shock' effect of SET rather than the change in relative prices of different inputs which was responsible—though the first actions might then be followed by ones which would not have been profitable in the absence of SET.
- (b) The scope for introducing self-service (or even self-selection) in certain trades is very limited and this method of reducing labour costs may not be open to all retailers. Two examples brought to our attention were tobacconists and fruiterers. In the former case, we were told that 'the scope for pilferage with self-service would be enormous and we have not

given it any consideration'. In the second case, a large multiple fruiterer told us that 'an endeavour was made to convert a number of branches to self-service. This experiment, however, was clearly proved to be unprofitable, and it is perhaps worthy of note that in supermarkets there has been a change, in part if not in whole, from the self-service of green-grocery to counter service'.

Increased Mechanisation

The only specific question regarding increased mechanisation asked in the case of the large retailer enquiry was whether SET had led them to make increased use of vending machines. Only five out of 110 firms answered that it had. In the case of tobacconists, where the use of vending machines is obviously already widespread and further use might be anticipated, we were told by one leading firm that they had decided not to expand their use of them because of the high losses due to theft and vandalism. They pointed out that SET did not improve the case for vending machines as much as might be expected, since it had increased the cost of servicing them, and with considerable vandalism this was an important item.

In the interviews with retailers and in the comments made by other respondents, a number of other aspects were discussed. These included increased mechanisation in the handling of goods, greater use of machine accounting (including the use of computers) etc. The main impression which we gained was that the increase in mechanisation had been relatively unimportant (so far as the effect on costs or labour productivity is concerned), and that it was therefore not very necessary to try to say how much of this small item should be attributed to SET. For what it is worth, however, our impression is that where SET could be regarded as the cause, it was mainly a case of serving as a 'shock' to induce action which would have been worthwhile anyhow.

COMPOSITION OF EMPLOYMENT

Since SET is not charged as a percentage on payroll, it can be expected to provide some incentive for traders to employ those types of labour for whom the cost of SET is small in relation to the wage. In the first year of SET this incentive was particularly marked in the case of part-time workers, since the tax payable on a part-time worker employed for more than eight hours a week was the same as that for someone employed full-time. In September 1967, however, the rate for part-time workers employed for less than twenty one hours (and more than eight hours) was reduced to half that for full-time workers and when SET went up in September 1968 the proportion fell to a third of the rate for full-time workers; in July 1969 the amount payable for part-timers was increased in the same proportion as the increase in rates for full-timers. Throughout the period of operation of the tax the rates for women have been half those for men working the same number of hours.

This section examines whether these differentials have had any enduring effect on the composition of employment (ignoring the initial switch from part-timers in 1966-7). Has SET led firms to employ more part-time workers rather than full-time workers? Has SET encouraged the use of Saturday-only workers? What has happened to the male-female ratio? In considering these and similar questions it is important to remember that many retailers have experienced difficulty in recruiting and retaining the labour force they wanted, and of course change always takes time even where labour is freely available.

It may be helpful to begin by giving some indication of the importance of the differential rates. In Chapter V, it was shown that the original SET rates had led to an increase of some 8.0 per cent in labour costs for a full-time adult man as compared with a 6.5 per cent increase for a full-time woman; from another point of view, this meant, *on the average*, an increase in the number of women who could be taken on for the same outlay as would secure 100 men—broadly speaking, from 164 to 166. For some types of work this will clearly produce no tendency to switch, but one must beware of basing conclusions simply on averages. Where men and women are doing broadly the same job the man's pay may well show a much smaller superiority over the woman's, so that SET added significantly more to the cost of employing men in percentage terms, as well as absolutely; even apart from this, a profit squeeze which sets the business looking for economies is likely to make it reconsider whether the advantages (in customer-reactions, etc.) of employing more expensive men rather than less expensive women are sufficient to outweigh the extra cost. As before, one may expect to find that SET produced a 'shock' effect, which induced the taking of action which would have been sensible anyhow.

Part-time Workers

In the case of part-time workers, the need to pay a full National Insurance stamp for those working over eight hours a week made the hourly cost to the employer greater than with a full-timer before SET was introduced, as shown (for a woman) in the first column of Table XIV.3. The position in July 1969 is shown in the second column and it is clear that SET as such favoured the employment of women for twenty hours or for less than eight. However, it still remained cheaper per hour to employ a woman full-time than for twenty hours, and of course the needs of the business, the organisational costs and the difficulty of recruiting people for particular hours might lead to the adoption of arrangements which superficially seemed expensive.

TABLE XIV.3 *Effect of SET on the Relative Cost of
Different Types of Part-time Labour at July 1969
(Adult female workers)*

Hourly labour costs ¹					
Hours worked per week	Without SET		With SET at post-July 1969 levels		Difference d.
	s.	d.	s.	d.	
Less than 8	6	0	6	0	0
10	7	5	8	3	10
20	6	9	7	1	4
25	6	7	7	6	11
30	6	6	7	3	9
40	6	4	6	11	7

¹ At an assumed hourly wage of 6s. per hour and including employer's N.I. contribution.

The importance of these constraints in the case of retailing was brought out in our interviews with respondents and in comments made in answer to the questionnaire. As far as the first is concerned, there are obviously a number of factors which lead to considerable rigidity in staffing requirements at least in the short-run. The most important is that arising from the distinctive weekly pattern of demand which is found in most trades. Frequently the firm needs labour to staff the shop fully on Friday and Saturday and one full-timer is no substitute for two part-timers coming in for those two days. Other rigidities are those introduced by the hours of opening and the need to provide staff to cover the lunch periods. In some cases the composition of the labour force could be changed but only with changes in the method of working. For example, the introduction of self-service may allow firms to substitute part-time for full-time labour, but this clearly represents a major change in the nature of the firm's trading and is not a decision that is likely to be strongly influenced by small changes in the relative costs of different types of labour.

The Department's Enquiries

The information collected in the DAE's own enquiries was of two types. Firstly, the form for large retailers asked for details of the composition of the firm's labour force at a date in April of each year—broken down into full-time (adult male, adult female and juvenile) and three categories of part-time workers. This represents the historical record with regard to the composition of employment. In addition, firms were asked in the questionnaires about the effect of SET on their employment policy and whether it had led to changes in the type of labour employed.

The statistical information for large retailers is summarised in Table XIV.4 for various dates, which may be thought of as representing respectively:

- (a) Pre-SET (not even announced)—April 1966.
- (b) SET at 25s. with bias against part-timers—April 1967.
- (c) SET at 25s. with less bias; 37s. 6d. had been announced—April 1968.
- (d) SET at 37s. 6d., with 48s. just announced—April 1969.

We could not collect useful figures with SET at 48s., largely because of seasonal problems. It is important to note that the figures give the percentages which each category represents of the *full-time-equivalent* total, which serves to put the role of part-timers into better perspective.

If we examine first of all the breakdown between full-time and part-time workers, there is very little change between April 1966 and either April 1968 or April 1969. Within the full-timers, the proportion of adult females has risen and that of juveniles fallen; in effect this means a fairly definite move from male to female workers—a result which is confirmed by the annual figures for exchange of insurance cards, which fell between mid-1966 and mid-1968 by 8.4 per cent for males and 4.8 per cent for females.

Within the part-time labour force there has been a rise in the proportion in the eight to twenty hour group at the expense of the twenty-one to thirty hour group (as one would expect), and this has been very marked since April 1968: the eight to twenty hour group has increased by some 40 per cent and the twenty-one to thirty hour group fallen by a similar percentage. Examination of the figures for individual trades (not shown here) indicates that this change was especially marked in the food trade, where the eight to twenty hour group

rose from being 3.3 per cent of the total FTE labour force to 7.9 per cent between April 1968 and April 1969, whereas the twenty-one to thirty hour group fell from 10.1 per cent to 3.9 per cent.

TABLE XIV.4

*Composition of Labour Force for
Large Retailers*

(The figures give the percentage of the total *full-time-equivalent** labour force contributed by each category)

Category	April 1966	April 1967	April 1968	April 1969
Full-time { Male	40.0	39.9	40.0	39.4
Female	34.5	34.5	35.1	37.4
Juvenile	12.2	11.9	11.3	10.2
Full-time total	86.6	87.5	86.4	87.0
21-30 hours	7.9	6.9	7.2	4.4
8-20 hours	3.7	3.6	4.4	6.3
Under 8 hours	1.8	2.0	2.0	2.3
Total	100.0	100.0	100.0	100.0

* The three categories of part-timers have been counted as equivalent to $\frac{1}{2}$, $\frac{2}{3}$ and $\frac{1}{3}$ of a full-timer respectively.

Some check on these results can be obtained from the enquiry carried out in May of each year by the DEP into the selling staff in retail shops, but unfortunately these do not distinguish between workers doing more or less than

TABLE XIV.5

*DEP Selling Staff Enquiry—Composition of
Employment*
(Percentage of total FTE*)

Category	May 1966	May 1967	May 1968
Adult male full-time	20.3	20.1	20.1
Adult female full-time	49.0	49.9	49.0
Juvenile full-time	14.4	14.3	13.7
Total full-time	83.7	84.3	82.8
Part-time (8-30 hours)	12.4	11.7	12.9
Saturday-only	3.9	4.0	4.4
Total	100.0	100.0	100.0

* Counting Saturday-only as $\frac{1}{2}$, other part-time as $\frac{1}{3}$.

Source: DEP Gazette, December 1966, 1967 and 1968.

twenty-one hours, and so throw no light on the crucial point discussed above. The figures obtained from this enquiry for May 1966 to May 1968 are shown in Table XIV.5. The apparent fall in the percentage shown for full-time is probably explained in part by the failure to divide the category of eight to thirty hours, which means that its contribution in the later years is exaggerated relatively to pre-SET conditions, when more of these people worked for twenty-one to thirty hours.

Questions on the Influence of SET

As was emphasised earlier, the figures presented above simply represent the historical record for the period 1966 to 1968 and the changes shown cannot necessarily be attributed to SET. In the questionnaire we attempted to discover whether the large retailers felt that SET had led to any change in their employment policy. The results of these questions are summarized in Table XIV.6.

The only initial change reported by more than half our respondents was that of replacing part-time workers for whom SET was payable by part-time workers who were not liable—who would be working less than eight hours, or double-jobbers. As we have seen, however, the increase in the size of this group was not very marked over the period since April 1966 and the interviews did not suggest that this effect of SET was quantitatively important except in special cases. About a quarter said that they had replaced part-timers by full-timers when SET was introduced. When, however, the revised rates for part-time workers were introduced in September 1967, half the respondents adjusted their employment policy and nearly all of these said that they reduced the number working between twenty-one and thirty hours. Many commented to the effect that they gave their staff the choice of working either twenty hours or full-time.

The questionnaire also explored other possible changes in employment policy. One might, for example, expect that the fact that SET was on a *per capita* rather than a payroll basis would provide an incentive to use skilled rather than unskilled labour and to pension off workers who were past the retirement age but had been kept on through a sense of loyalty. Around a quarter of the retailers reported that SET had led them to concentrate on skilled rather than unskilled staff, and one-eighth reported the dismissal of staff beyond the retirement age.

We were not able to make a proper assessment of the importance of these policies, but our general impression, based partly on discussions in our interviews, is that it was not very great. Thus the shortage of skilled staff was regularly mentioned at our interviews, so that the first policy may have meant little more than a policy of running down the number of unskilled (essentially through natural wastage) to whatever extent was considered desirable in view of SET and other factors, coupled perhaps with a special effort to retain, attract or train skilled people.

On the dismissal of elderly people, it may well be that retailers who were making major reductions in staff included those people who were past retiring age as 'obvious' victims—but such cases were not numerous, except where a branch was closed. Apart from that one trade association commented:

'In the larger businesses there are frequently long service employees whose standard of efficiency is below normal and who are retained for sentimental reasons or out of a sense of responsibility. The imposition of SET has forced a number of firms to review their policy towards these people.'

Such a policy probably does not add up to much in the aggregate, but it could obviously create hardship in individual cases, especially as such people would have difficulty in securing another job.¹

TABLE XIV.6 *Changes in Policy on Types of Labour Employed for Large Retailers*

(1) Did the introduction of SET in 1966 lead to a change in your policy with respect to the proportions of different types of labour employed?

	Percentage reporting change
Replace part-time by full-time	23
Replace part-time for whom SET is liable by part-time not liable for SET	60
Replace adult male by adult female	16
Replace adult female by adult male	0

(2) Did the introduction of SET in 1966 lead you to pursue the policies stated below?

	Percentage answering 'Yes'
Concentration on skilled rather than unskilled staff	24
Dismissal of staff beyond the retirement age	13

(3) Did the revised rates introduced in September 1967 for part-time workers employed for less than 21 hours cause you to make any change in your employment policy?

Percentage answering 'Yes'	48
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Conclusion on Effects of SET

The broad conclusions at which we arrived were that the effects of SET on the composition of the labour force were not of great quantitative importance, apart from a certain shift amongst the part-timers away from the twenty-one to thirty hours category, and a certain modest switch from males to females. For what it is worth, our single question to the smaller retailers suggests a corresponding absence of major change in that field too: only nineteen out of two hundred and two firms reported making any change in the type of labour employed when SET was introduced in 1966, and only ten in 1968. These changes (though smaller) seemed to be on the same lines as with the large retailers.

¹ We hope to include in our Final Report a study of the effects of SET in making it more difficult for people of limited capacity to secure jobs, including especially school leavers in that category.

It should be remembered that some concession was made in respect of the elderly from September 1968.

It would however be a mistake to ignore the changes which did emerge, even though they were modest. They represent a perfectly natural reaction to SET, aimed at getting down costs. It is of some interest to note that much the same reactions were found in Northern Ireland (as described in Appendix H), in spite of the special measures taken to delay the full imposition of the tax on male workers.

NUMBER OF SHOPS

As was explained in Chapter X, pages 76–77, there is a case for examining what effect SET has had on the number of shops—or, more properly, on the total retailing capacity available—because this might indicate one way in which the increase in productivity is secured. It is also interesting to examine what has happened to the amount of new building of shops which is being put in hand, since this is some guide to the consequence of the profit squeeze on retailing.

It was obviously impossible for us to undertake a major study of this part of the field, but we made use of three separate approaches: a study of published statistical data, a small-scale enquiry into the state of the property market for shops, and various questions included on our enquiry to large retailers and to trade associations.

Unfortunately, some of the most important official figures are not as up-to-date as could be wished, and we intend to include a more elaborate study of changes in the number of establishments in various trades in our Final Report. This is one aspect in which the findings of the present Report must be regarded as both incomplete and provisional.

Published Data

Table XIV.7 shows changes in floor space during the years up to 31st March 1967, as derived from the work of preparing and maintaining valuation lists. The figures have a rather wider coverage than retailing, but are certainly a good guide to what is happening: the additions comprise new buildings, extensions and changes of use from other uses to retailing etc., whilst the reductions include demolitions and ‘outward’ changes of use.

TABLE XIV.7 *Changes in Floor Space for England and Wales**
(’000 sq. ft.)

Year ended 31st March	Additions	Reductions	Net change
1965	13,184	5,262	+7,922
1966	13,849	4,940	+8,909
1967	13,401	5,915	+7,486

* The figures cover shops, restaurants and banks in shopping areas.

Source: Reports of the Commissioners of Her Majesty’s Inland Revenue.

These figures imply that the net addition in each year was about 1½ per cent. It is tempting to connect the increase in 'reductions' during the year to 31st March 1967 with the introduction of SET, but clearly no conclusions should be drawn until the figures are extended to 1968 and 1969.

Table XIV.8 gives figures for rateable values for shops etc. over a longer period of years, and does go up to 1st April 1968. It will be seen that the number of establishments has fallen every year since 1959, but that the rateable value has increased in every year except 1963-4; the latter is much nearer to being what we want as a measure of retailing 'capacity' available (subject to the allowance for *vacancies* discussed below), since each half of the table is based on a single year's rental values, but it is naturally not ideal.

TABLE XIV.8 *Rateable values for England and Wales*

1st April	Shops assessed with private dwelling accommodation		Shops (including banks in shopping areas) and cafes		Total shops, banks in shopping areas and cafes	
	Number	£m.	Number	£m.	Number	£m.
1958	325,628	20.2	347,384	52.7	673,012	72.9
1959	321,197	19.9	353,195	54.6	674,392	74.5
1960	317,518	19.8	356,555	55.9	674,073	75.7
1961	313,833	19.7	359,997	57.5	673,830	77.2
1962	309,168	19.5	362,384	59.1	671,552	78.6
1963 (31st March)	303,616	19.3	365,902	60.8	669,518	80.1
1963 (1st April)	294,257	44.3	374,671	165.5	668,928	209.8
1964	290,202	43.8	374,615	165.5	664,817	209.3
1965	284,881	43.2	376,055	166.8	660,936	210.0
1966	279,079	42.5	379,060	169.3	658,139	211.8
1967	272,878	41.9	381,859	172.4	654,737	214.3
1968	266,011	41.2	385,291	175.4	651,302	216.6

Source: Reports of Commissioners of Inland Revenue.

N.B. A new rating list came into force on 1st April 1963.

It will be realised that movements in these figures largely reflect decisions taken before SET had even been announced: many building schemes, for example, require more than two years from the time when the scheme is effectively conceived to the time when the shop is included in the rating list. With conversions to (or from) other uses than retailing the reaction can be faster, but we do not know how important this factor is.

The tentative picture conveyed by these figures is of a rather negative kind: all the various figures have continued to move in the same direction as had been followed for a good number of years and the variations in the speed of their movement are not great enough to be worthy of much note. If anything, the rise in the final figure (for rateable value) has been faster between April 1966 (pre-SET) and April 1968 (the latest figure available) than it had been before: but this probably reflects the maturing of building schemes started before SET

was conceived, and it is subject to the crucial reservation that the figures reflect shops *in existence* with no allowance for vacancies.

Table XIV.9 gives figures for gross capital formation in new buildings etc. done by retailers. It throws some light on the gross additions to retailing 'capacity', but the figures reflect *expenditure* in each year rather than completions, and they do not cover expenditure by property companies or other investors in shops for letting. As with the previous table, the figures largely reflect decisions taken before SET was announced, but this factor is not so important in that they reflect a somewhat earlier stage of the development process, and they go up to the end of 1968. Insofar as they are influenced by events since the announcement of SET, we are unable to distinguish its effects from those of the July 1966 'squeeze' and the progressive disappearance of resale price maintenance.

More useful—though for a different purpose—are the figures in Table XIV.10 for new orders placed, which reflect the reactions of potential investors of all kinds to the situation and prospects in the market for shops. Unfortunately the series does not go back beyond 1964, but it is probable that that year was a peak, since this is true for the wider series which includes shops (covering commercial building), and which goes back for a good number of years.

The main inferences from this table seem to be that the volume of new orders declined sharply in the second half of 1966, remained low in 1967, and then recovered during 1968 and the first half of 1969. In judging the height of the latest figures one must remember that 1964 was probably a peak year, but also that the low orders placed in 1967 may have left a legacy of schemes which had been put on one side, although preparatory work had been done. Firm conclusions are obviously impossible, but the figures give little or no support to the view that the reduced profitability of retailing under SET has had a devastating effect on shop building. They would however be consistent with the

TABLE XIV.9 *Gross Fixed Capital Formation in New Buildings and Works by Retailers in the United Kingdom*

Year	£m. (current prices)	£m. 1963 prices)	As a percentage of total GFCF in new buildings and works
1959	62	68	5.8
1960	63	69	5.4
1961	65	70	4.8
1962	71	73	4.8
1963	73	73	4.8
1964	88	85	4.9
1965	81	76	4.2
1966	72	65	3.6
1967	75	67	3.4
1968	73	63	3.1

Source:

National Income and Expenditure Blue Book.

Board of Trade: Census of Distribution in census years and enquiries into distribution and services on a sample basis in other years.

view that an active development of new supermarkets and other shops which save labour is being accompanied by a high rate of vacancies (or demolitions, or conversions to other uses) amongst older shops.

TABLE XIV.10 *New Orders for Shops in Great Britain*

Year	New orders for shops by private sector £m. (current prices)	New orders for shops by private sector £m. (1963 prices)	New orders for shops by private sector as percentage of total private orders for non-housing new work
1964	106	104	12.3
1965	100	94	12.3
1966	84	76	10.7
1967	77	68	10.3
1968	95	81	11.5
1965 I	28	27	13.2
II	18	17	8.5
III	32	30	15.0
IV	22	21	12.4
1966 I	28	26	13.5
II	20	18	9.9
III	23	20	11.1
IV	13	12	7.7
1967 I	31	27	13.7
II	16	14	9.1
III	19	17	10.3
IV	11	10	6.9
1968 I	27	23	13.9
II	17	14	8.2
III	30	25	14.2
IV	21	18	9.9
1969 I	29	24	13.2
II	25	20	9.9

Source: Ministry of Public Building and Works: Monthly Bulletin of Construction Statistics. Deflation to constant prices by Index of the Current Cost of New Construction. Figures for 1969 II are provisional.

Information from Large Retailers

In its nature, an enquiry addressed to retailers who are still in business cannot provide much of the information which is wanted for a study of changes in the number of shops, especially when one is thinking largely of closures: we did not attempt to approach a sample of businesses which had closed down altogether (a truly formidable task!), but we did get some clues about the policy of multiples in relation to the opening and closure of branches. This could not, however, serve as any sort of direct indicator of changes in retailing capacity available.

In the questionnaire to large retailers, we asked how many branches they had closed in the last two years. Of the 110 firms responding, half had not closed any branches, and 80 per cent had closed fewer than ten. In many cases, moreover, the closures represented either the chance expiry of a lease, with a transfer of the branch to a new location, or else—more importantly—a long-standing policy of closing small shops and opening a smaller number of large ones. The most that one might infer from the answers was an absence of a *general* policy of reducing the amount of capacity provided.

There were, however, two cases in which there appeared to have been a clear reduction in retailing capacity, and where the firms concerned regarded SET as an important element amongst the factors leading to the decision. Firstly, a number of the co-ops responding to the enquiry reported the closure of 'non-economic' branches (often in outlying parts of their area), and it seems likely that in some cases at least these closures did not lead to the opening of an alternative shop by some other trader (although naturally this could not be explored in detail): admittedly, these closures were often accompanied by the opening, or extension, of a new central store by the same co-op, but this can hardly be regarded as a complete substitute. One co-op told us, for example, that 'further action has been taken by the closure of four retail outlets in rural areas, the withdrawal of all mobile service shops supplying the rural areas, and the cessation of the order delivery service in all areas'.

Secondly, we were told by a leading firm of newsagents that SET had definitely accelerated their plans to close small units and railway book stalls, and in the latter case they had not usually been taken on by anyone else. This might conceivably have stimulated an expansion of facilities outside the station by some other trader, but it seems more reasonable to regard it as implying a definite reduction in capacity.

Questionnaire to Trade Associations

It seemed more reasonable to ask trade associations, which are interested in the affairs of their trade as a whole, whether they felt that they could express an opinion about whether closures in their trade had been more rapid recently than in earlier days. Specifically, we put the following question: 'Comparing the first half of 1968 with the first half of 1966, do you consider that the rate of closure of businesses (not including those sold as going concerns) has increased in your trade?'.

Of the twenty-six associations replying to the questionnaire, all but three thought that the rate of closures was higher in the second period, and some supported this with figures showing the decline in their membership. However, none of them attributed it to SET alone and all those that commented recognised that it was difficult to separate the effect of SET from that of other factors. For example, one Association commented that 'There has been an increase in closures in the period under review, but businesses are forced to close, not by virtue of one main cause, but through a combination of factors, one of which must be SET', and another said 'It would be extremely difficult to state categorically that any business had closed purely or mainly by virtue of the imposition of SET'.

Our Enquiries about the Property Market

The statistics given in the first part of this section had one crucial element missing—the extent of vacancies in shop properties. Similarly, our enquiries to individual retailers about the closure of branches could not take us very far

without some idea as to whether the branches which were closed would be likely to have been taken up by other traders, and even the enquiries to trade associations about closures in general suffered from the defect that they did not cover the off-setting feature of expansion of capacity by members still in business. The best way which we could find of attempting to close these gaps was to go directly to people who were likely to know about the balance of supply and demand for shop properties as whole, and to ask them both about the changing extent of vacancies and also about the movement of rents (which clearly provide a useful indicator of the state of the market).

Our main source of information about the current state of the property market was a leading firm of surveyors, valuers and auctioneers who deal in shop property, and we are extremely grateful to them for their assistance. We also, however, obtained information from other knowledgeable sources, and the responsibility for the conclusions which we drew from this pool of experience (and from our contacts with retailers) rests wholly with us.

Our first conclusion is that in the period 1965-6 to October 1969 there was a noticeable change in the state of the shop property market. In 1965-6 the market was dominated by the suppliers, with rents continuing their previous rapid rise, whereas now there is a position of better balance between supply and demand, in which landlords are often having to make greater concessions to attract tenants. The contrast can perhaps be seen best in the simple statement that there are now a considerable number of properties in good trading positions which have been vacant for some time, and which would have been filled very quickly in 1965.

Secondly, rents for shops on good central sites have risen since 1966, particularly in towns where there has not been a substantial addition of newly built premises. On top of this, there has also been a change towards more leases being negotiated with provision for rent reviews, and for rent reviews at shorter intervals: when a continuing increase in rents is expected, this shortening of the period for which the initial rent is fixed may be regarded as an alternative to a higher initial rent.

Even with allowance for this latter factor, however, it seems that the rise in rents between 1966 and 1969 has been slower than that between 1960 and 1966.

Thirdly, the conditions vary a great deal from one town to another, so that the first two conclusions must be regarded as somewhat heroic attempts to arrive at a generalisation.

Tentative Conclusions

The evidence presented in this section is necessarily fragmentary: indeed, it can hardly be regarded as a collection of elements which should build up into a coherent whole, but rather as a series of straws which may tell us something about a number of different winds. It is difficult enough to sort out the historical record—on which a better view will be possible when the official statistics have been brought more nearly up to date—let alone sorting out the effects of SET from those attributable to the delayed impact of pre-SET decisions (on buildings etc.) and other contemporary disturbances (such as the general squeeze, the progressive ending of resale price maintenance, etc.).

It seems right, however, to set out our preliminary views for what they are worth, whilst stressing their extremely tentative character. They are:

(a) Even allowing for vacancies, retailing capacity has probably continued to increase in volume since 1966, but at a slower rate than in the past.

(b) SET and the ending of RPM have probably played some role in this slowing down, by lowering the profits obtained in retailing.

(c) There is little evidence to suggest that this consequence of SET and the RPM changes have been important in quantitative terms as yet. For my own part, however, I would expect the effect of SET on the number and capacity of retail establishments (whatever that effect may be) to be essentially a long-period phenomenon, which would not be great in the first two or three years.¹

¹ Unfortunately, on this view it will probably never be possible to assess the influence of SET on the number and capacity of retail establishments at all satisfactorily. In the early years one expects that there will be little to measure, whatever final impact may be expected; in the long run the effect *might* be large, but it will inevitably be mixed up with the influence of many other factors, and so be extremely hard to disentangle.

CHAPTER XV FURTHER EFFECTS OF SET ON WHOLESALING

This chapter follows the same broad pattern as the last, but does not include a separate section on the number of establishments—a topic which is dealt with briefly in the second section, on methods of working. We continue to use the phrase 'effects of SET' as shorthand for the 'effects of SET and other abnormal new factors'.

QUALITY OF SERVICE

We asked the wholesalers whether they had made any changes in the services which they provided for customers since the first half of 1966, and the response to this question is summarised in Table XV.1. Although a few of the miscellaneous changes represent improvements in service, it is apparent that the preponderance of changes represented a reduction in the service offered by the wholesaler in question. With a few of the items—e.g. 'cutting out small accounts' or 'reducing territory covered'—the service given to the customers who were still served might have improved, but in general the changes would lead to a rather worse service, particularly for customers who bought in small quantities. In an extreme case, a customer might find that he could obtain less credit, had to place a larger minimum order (or perhaps pay a surcharge for small orders), received fewer calls from travellers and obtained less frequent deliveries of the goods which he had ordered.¹

The most common change in services was said to be a stricter control of credit, which was reported by sixty-two out of 167 firms. This is not to be taken, however, as meaning that wholesalers gave less credit in proportion to sales, because in a period of credit squeeze it was to be expected that customers would seek to obtain more credit from their suppliers. We did, indeed, test this by using the financial returns supplied by the wholesalers to calculate the ratio of debtors (at the end of the year) to sales for 1965 and 1967. The average of these ratios actually increased very slightly between 1965 and 1967, and the percentage increase was virtually the same for the firms which said that they had imposed stricter control of credit as for the other firms.

One further point is perhaps worth making, though one cannot be precise about its importance. Our questionnaire was designed to elicit information about deliberate actions to change the quality of service, but there are other ways in which the service may deteriorate as a result of an economy campaign induced by a profit squeeze, such as a less rapid response to incoming orders or enquiries, especially at times when the clerical staff is busy. Our interviews rather suggested that there might have been some deterioration of this kind, which is indeed quite understandable when the volume of goods handled per person employed is rising.

¹ Even in these cases, however, it may be that the customer would get almost as good a service by dealing with fewer wholesalers on more rationalised lines.

TABLE XV.1

Changes in Services Provided by Wholesalers
(Number of returns showing the answer)

Trade	Since the first half of 1966 have you made any changes in services?		Specific Changes Reported										Other changes ¹
	Yes	No	Average number of changes per firm	Switch to cash and carry	Stricter credit control	Ceasing to supply small retailers	Closed small accounts	Raised minimum size of order	Small order sur-charge	Less frequent deliveries	Less frequent calls on customers		
Groceries	16	0	3.0	10	7	11	0	10	0	3	2	5	
Perishable Foods	13	16	0.5	0	7	0	1	1	0	3	0	2	
Other Food and Tobacco	17	6	1.6	11	11	0	3	7	1	0	1	2	
Footwear	6	2	1.4	0	3	3	0	1	1	0	2	1	
Textiles and Millinery	15	5	1.3	2	4	1	2	3	7	5	1	0	
Floorcoverings	5	4	0.7	0	3	0	0	0	0	0	0	3	
Electrical Goods and Hardware	29	5	1.4	3	16	3	1	7	4	5	7	3	
Newspapers, Toys and Stationery	11	8	0.8	2	7	1	0	1	1	0	1	2	
Pharmaceuticals	6	3	1.0	0	4	0	2	2	0	0	1	0	
Total	118	49	1.3	28	62	19	9	32	14	16	15	18	

¹ These include such changes as: reducing territory covered, reducing number of rounds, introduction of van-selling, increasing range of goods in stock, increasing delivery service and calls, extending Group Trading (grocery).

It is not clear to what extent the reductions in services are effects of SET, rather than a continuation of historical trends (based, perhaps, on the rising cost of labour), or consequences of the credit squeeze or the progressive ending of resale price maintenance (which could be expected to shift the emphasis in wholesalers' competitive efforts away from service and on to price). There seems no reason to doubt, however, that SET played some part in producing this widespread reduction in services, primarily because it produced a profit squeeze, by raising costs under circumstances when wholesalers had difficulty in raising their margins sufficiently to cover this and other increases in costs. In a number of cases wholesalers made it clear that they had resorted to reductions in the quality of their service with extreme reluctance, because they regarded 'providing a good service' as the essence of their business, and as their main way of competing both with other wholesalers and with manufacturers.¹

We also obtained some information about the change in services supplied by wholesalers from our interviews with the smaller retailers. These left us in no doubt that the services received from wholesalers had indeed deteriorated in many respects, although honourable exceptions were also mentioned. Some retailers also claimed, however, that services from manufacturers had also been reduced, and our interviews with manufacturers produced a few instances where it had apparently been deliberate policy to reduce the scope of their deliveries to smaller retail customers: these manufacturers apparently considered that such retailers could be supplied more cheaply by wholesalers, who could cope with a variety of goods in a single combined operation. This information seems to suggest that SET is not the only factor leading to a reduction in the costly process of servicing customers who buy in small amounts.

Finally, it is just worth recording that we used our data to see whether there was any significant tendency for trades which showed a big percentage increase in gross margin, to show a small proportion of firms as having reduced the quality of the services which they provide. For what it is worth, this investigation did suggest a connection of this kind, although it was naturally far from perfect.

CHANGES IN METHODS OF WORKING

SET raised the cost of labour relatively to that of most other inputs, and it also imposed a profit squeeze on the wholesalers. One might expect, therefore, that firms would launch an economy drive, which would lead to changes in operating methods, and that the new methods would tend to employ less labour in proportion to the volume of goods sold.²

The most radical change in methods was the introduction of cash-and-carry methods by firms which did not previously employ them, or a switch from traditional methods to greater reliance on cash-and-carry. This particular system is discussed in a special subsection below, after a general review of the information which we received from our panel.

The relevant questions on our form, which is reproduced in Appendix B, come in section 4 on 'other measures to reduce costs', and the replies which we

¹ Several wholesalers of pharmaceuticals mentioned a special reason why they had to maintain a frequency of deliveries which seemed extremely expensive. Retail chemists are legally bound to supply the brand of drug stipulated on a doctor's prescription, and cannot hold an adequate variety of stocks, so that wholesalers must make immediate delivery.

² As explained on page 129 in connection with retailers, the incentive to replace labour by capital was reduced by the fact that SET applies to building, and that investment grants do not apply to the distributive trades except in respect of computers.

received are summarized in Table XV.2. In the main, this table can be left to speak for itself, but we should add that the interviews showed that in some cases the changes reported were relatively small: for example, 40 per cent of the firms said that they had introduced more mechanization in their warehouse, but it sometimes emerged that this amounted to no more than the introduction of a conveyor belt or of rollers for facilitating the movement of goods. The interviews also suggested that some firms had made changes in methods which did not fit with any of our items, and were not sufficiently definite to be worth reporting under the heading for 'other changes', but which had had a modest effect on costs.

Cash-and-Carry

In the main, the cash-and-carry system of wholesaling is designed to serve retailers who want to buy in relatively small amounts—although this can naturally include some purchases by large retailers who want to get supplies quickly. It is designed primarily to serve retailers operating within a fairly small mileage of the warehouse, and a wholesaler will commonly have a warehouse in more than one town.

Twenty-eight firms out of 167 reported that they had started or extended their cash-and-carry business since the first half of 1966. Ten of these firms were in the grocery trade, where cash-and-carry had been growing in importance during the 1960's, being especially influenced by the decline in the effectiveness of resale price maintenance: this had tended to erode the gross margin which wholesalers could secure on groceries, and so stimulated the search for a method of trading which would lower costs, whilst still serving their smaller customers.

The effectiveness of cash-and-carry as a method of reducing expenses is well illustrated in the very helpful table provided to us by the National Federation of Wholesale Grocers, and reproduced as Table XV.3. The cost items on which cash-and-carry produces a substantial economy have been grouped at the top of the table, starting with the obvious ones ('representatives' and 'transport'), but going on to items which are not perhaps so obvious, such as 'office' and 'finance'. The important point is, however, that the table shows the quantitative size of the economies, and also the absence of any item on which cash-and-carry shows an important excess.

As the table shows, the total expenditure per £100 of sales is roughly halved in the cash-and-carry firms, and amounts to little more than £3. Some of the saving in costs is, of course, transferred to the customer, who has to provide his own transport, for example; but he also gains through a reduction of office expenditure, and he can obtain very speedy supplies.¹

The table also shows that the gross margin earned by cash-and-carry firms was substantially smaller than that secured by other firms, indicating that the benefit of the economies was in large part passed on to the customers. However, the net profit shown is about double that of the traditional wholesalers, even when expressed per £100 of sales (although this result is seldom achieved in the first year). As a percentage of the gross profit it is, of course, well over double the corresponding figures for wholesalers using traditional methods, but the data do not enable us to make a comparison on the basis of profits as a percentage of capital.

¹ See page 81 for a further discussion of this point.

TABLE XV.2

Measures by Wholesalers to Reduce Costs

(The figures are the number of firms who answered 'Yes' or 'No' to the question whether they had adopted the measure since the first half of 1966)

Trade	A substantial increase in packing done by suppliers		Merged with or taken over other firms		Reduced the number of warehouses or depots operated		Introduced more mechanization in the warehouse		Increased your target stock/sales ratio		Changed methods for handling or packing goods		Started to use the services of a computer		Joined a voluntary buying group		Made other changes to reduce costs ¹	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Groceries	3	12	8	9	8	7	11	5	9	7	7	8	5	11	1	11	11	4
Perishable Foods	7	22	3	26	5	24	10	19	Not asked	9	20	2	27	0	29	12	17	
Other Food and																		
Tobacco	4	16	8	15	6	17	11	12	14	9	7	16	3	20	6	13	13	9
Footwear	2	5	0	7	1	6	1	6	3	4	1	6	0	7	0	7	3	4
Textiles and																		
Millinery	2	18	2	18	6	14	8	12	12	8	7	13	7	13	2	18	11	7
Floorcoverings	1	8	0	9	0	9	5	4	1	8	2	7	0	9	0	9	3	5
Electrical Goods																		
and Hardware	2	29	11	22	5	28	15	18	20	12	6	27	10	23	4	29	18	14
Newspapers, Toys																		
and Stationery	0	13	3	16	7	12	1	18	4	9	0	19	2	17	0	13	7	12
Pharmaceuticals	0	8	3	6	1	8	6	3	6	3	1	8	3	6	3	6	6	3
Total	21	131	38	128	39	125	68	97	69	60	40	124	32	133	16	135	84	75

¹ Other changes most commonly referred to were: Reorganization or reduction of office and clerical staff (8); Reorganization or reduction of deliveries and salesmen's rounds (7); Improved budget control (5).

Apart from groceries, the trades in which cash-and-carry has been extended most are frozen food, confectionery and tobacco. These trades are, of course, closely associated with grocery wholesaling and much the same considerations apply. In the rest of the field, only seven out of 128 firms reported any action on cash-and-carry, and it appeared that in these cases the reduction made in gross margins was proportionately smaller—but the starting figure was of course greater.

There is, naturally, some overlap between the traditional method of wholesaling, under which the wholesaler delivers the goods, and the full cash-and-carry system, under which the retailer selects the goods on self-service principles and drives away with them. Thus a number of wholesalers serve retailers who send their own van to collect supplies, notably in the electrical trade and in fruit/vegetables, but the wholesaler's operation has not been laid out to deal primarily with this type of customer, and the basis has frequently been 'credit' rather than 'cash'.

TABLE XV.3 *Operating Ratios for Cash-and-Carry and Traditional Wholesalers*
(All figures are percentages of sales in 1967)

Item	Cash-and-Carry (15 firms)	Wholesalers with turnover less than £1m.	Wholesalers with turnover between £1m. and £2m.	Wholesalers with turnover above £2m.
<i>Expenses</i>				
Representatives	0.06	1.19	1.12	0.85
Transport	0.05	1.25	0.93	1.09
Office	0.48	0.96	0.93	1.09
Finance	0.02	0.25	0.25	0.13
Management and Buying	0.69	1.01	0.68	0.55
Warehouse Wages and Equipment	1.42	1.64	1.47	1.28
Property	0.42	0.41	0.42	0.50
Sundry	0.02	0.10	0.09	0.08
Total Expenses	3.16	6.81	5.89	5.60
Gross Profit	4.99	7.66	6.89	6.53
Net Profit	1.83	0.85	1.00	0.93

Source: National Federation of Wholesale Grocers.

Finally, it is worth noting that the opening of a cash-and-carry warehouse makes it easier for a wholesaler to enforce rules in his traditional business which raise the size of the minimum order, or reduce the number of calls, etc. Old customers for small amounts can frequently be diverted in this way to the new system, with advantage to both parties.

Mergers and Closures

As was explained in Chapter X, there are considerable economies to be obtained under suitable circumstances when a wholesaler with several establishments can arrange to do his business from a smaller number, especially when there was some excess capacity. In practice, it seems that the scope for this kind of rationalization is greatest when there is a merger between two wholesalers, who were previously duplicating facilities, so that the pace of such mergers is a highly relevant factor in reducing costs.

Table XV.2 showed that thirty-eight wholesalers out of 166 reported that they had merged with, or taken over, other firms since the first half of 1966, and thirty-nine firms reported that they had reduced the number of warehouses or depots which they operated. There is naturally a good deal of overlap between these firms, but some firms had reduced the number of their warehouses without effecting a merger in the period—frequently because they had effected a merger before 1966, and had not yet completed the resultant process of rationalization.

Naturally, there have also been warehouses opened in the period, and we unfortunately failed to include a question on that subject, so that our information about the *net* change is not as good as it should be. Our impression—based partly on interviews—is, however, that there had been a genuine amount of rationalization during the period, in the interest of reducing costs.

We also asked the trade associations two questions:

- (1) Whether you think that, since the first half of 1966, there has been an important change in the rate at which businesses in your trade have closed (excluding those sold as going concerns).
- (2) Whether you think that there has been an increase in the rate at which firms have been taken over, or merged with other firms.

The answers which we received are summarized in Table XV.4. One should, however, add that a number of associations qualified their answers in various ways. Thus several said that the change had not been very great, so that it was really an exaggeration to answer 'yes' to question 1, insofar as that question asked whether there had been an *important* change; and others emphasised that

TABLE XV.4 *Trade Associations' Answers about Closures and Mergers*

Type of Association	More Closures?		More Mergers?	
	Yes	No	Yes	No
Traditional Wholesalers	12	6	13	5
Perishable Food Wholesalers	2	1	3	0
Industrial Wholesalers	6	4	8	2

the closures and mergers were not attributable to SET alone, and stressed other factors such as the abolition of resale price maintenance.¹

The Textile Distributors Association provided us with some additional information about the closure of businesses which is of considerable interest. They had made a survey of businesses which were thought to be operating as wholesale textile distributors in 1965: of the replies received, 17 per cent showed that the firms had ceased to trade.

The Role of SET

It is once again clear that a good number of the changes reported as part of the 'historical record' would have taken place anyhow, whether SET was introduced or not—especially in view of the ending of resale price maintenance. It is also clear, however, that SET gave a considerable stimulus to the search for more economical methods, and particularly to the introduction or further exploitation of methods which were known to be possible, but which had not been introduced. The 'shock' effect of SET in precipitating changes emerged clearly as an important element, especially when it was coupled with the very real difficulty of making a reasonable profit when costs were rising (for other reasons as well as SET) and it was difficult to raise gross margins in percentage terms.

One special point is perhaps worth mentioning. The number of wholesalers who had switched to cash-and-carry but were also operating their traditional methods simultaneously were encouraged by SET (on top of other cost increases) and by the ending of RPM to put their main energy behind the development of cash-and-carry, particularly as the retailers were anxious to get their supplies cheaper, partly in order to meet their own SET costs. One might perhaps also say that where the chance of making reasonable profits by traditional methods seemed small, wholesalers were more ready to take the risk of changing to cash-and-carry (and face the possible loss of some customers) because it at least offered the *possibility* of a good outcome.

Finally, in assessing the effects of SET one must not overlook its role in producing cost-savings in future years, which were not secured (or not fully secured) in the period under review. Thus it takes time to develop a new cash-and-carry operation, and some of the schemes which might reasonably be attributed to SET or the ending of RPM will hardly have been operating in 1967–8; similarly mergers take time to negotiate, and the economies to be derived from them do not come immediately after the merger, consequently the effects of SET on costs would not be fully visible in 1967–8, even if one is thinking only of the effects of the 25s. rate.

COMPOSITION OF EMPLOYMENT

The differentials between SET rates for full-time and part-time employees and between male and female employees were discussed in the previous chapter, and the same considerations apply with regard to wholesalers. However there are, to a certain extent, two basic differences between wholesalers and retailers concerning the composition of the labour force. Firstly, as wholesalers generally do not experience the same degree of 'peakiness' of demand as retailers, there is less incentive to employ part-time workers. Secondly, there would seem to

¹ It will, of course, be appreciated that we had not asked about the effects of SET in these questions, but only about 'the historical record'. Nevertheless, these additional points were welcome for purposes of interpretation.

be less scope for the employment of female workers in the wholesale trades, on account of the generally high percentage of employees engaged in transport and warehousing activities. In other words the constraints against changes in the structure of employment would appear to be more rigid for wholesalers than for retailers. This consideration applies most strongly to the industrial wholesalers and the perishable food trades, as was made very clear in our interviews, and we would expect that any tendency for SET to influence the composition of the labour force would show itself most strongly in the traditional wholesale trades.

The information collected by the DAE's own enquiries to wholesalers was of the same form as that collected for retailers. The statistical information for traditional wholesalers is summarised in Table XV.5. for April of each year shown. Again the figures give the percentages which each category represents of the *full-time-equivalent* total.

TABLE XV.5 *Composition of Labour Force for Traditional Wholesalers*

(The figures give the percentage of the total full-time-equivalent* labour force contributed by each category)

Category	April 1966	April 1967	April 1968	April 1969
Full-time Male	60.6	61.0	60.8	60.2
Female	25.8	26.4	26.5	26.2
Juvenile	8.5	7.7	7.7	7.8
Full-time Total	94.9	95.1	95.0	94.2
21-30 hours	1.9	1.8	1.7	2.2
8-20 hours	3.2	3.0	3.2	3.6
Under 8 hours	0.1	0.1	0.1	0.1
Total	100.1	100.0	100.0	100.1

* The three categories of part-timers have been counted as equivalent to $\frac{2}{3}$, $\frac{1}{2}$ and $\frac{1}{3}$ of a full-timer respectively.

Table XV.5 shows that there was little change in the proportion of part-time workers between April 1966 and April 1968, but that there was a marked increase

in this proportion from April 1968 to April 1969. Within the full-timers, the proportion of adult females has increased and that of juveniles has decreased (a similar pattern was found for large retailers in Chapter XIV). Examination of full-time figures for individual trades shows that the move towards employing more females is most marked in the textile and footwear trades and in the pharmaceuticals trade, whereas in the electrical goods and hardware trades group there has been a fall in the proportion of females. This tends to support our earlier observation that the scope for employment of females is greater where transport and warehouse employees account for a relatively low proportion of total labour (as in textiles and footwear), or where the work is light (as in pharmaceuticals).

In considering the part-time labour force, it must be remembered that part-timers represent only a very small percentage of the total labour force, and this may explain why there does not seem to have been a switch away from the 21–30 hour group, such as was found in retailing.

The Role of SET

The above changes in the composition of employment cannot, of course, be necessarily attributed to SET. As for retailers, an attempt was made in the questionnaire and in interviews to discover whether wholesalers felt that SET had influenced employment policy. Table XV.6 summarises the answers to the questionnaire section on employment for traditional wholesalers.

The percentages are in fact very similar to those found for retailers, apart from the answers to the questions on part-time employees; here it would seem that the revisions in SET rates for part-timers made in September 1967 and 1968 had little effect on employment policy. The most significant feature seems to be the relatively high proportion of respondents who sought to concentrate on skilled rather than unskilled staff (about a quarter).

The shortage of skilled staff was frequently mentioned at our interviews with wholesalers, so that this policy—as mentioned in the previous chapter with regard to retailers—may have meant mainly a running-down of unskilled workers, generally brought about by a policy of non-replacement when staff left. Indeed the actual dismissal of staff was rarely mentioned during interviews with wholesalers, although the relatively high percentage of respondents claiming to have dismissed staff beyond retiring age does tend to modify this impression a little. This policy of non-replacement may offer some explanation for the fall in the proportion of juveniles indicated in Table XV.5.

Another impression obtained from interviews was that the increased use of female labour, particularly married women, for certain types of work was considered by many wholesalers to be a move towards more skilled labour. In many cases married women were employed part-time, which seems one explanation for the increase in the 21–30 hour group referred to earlier. This policy seems to have been mainly initiated by the shortage of suitable male employees.

TABLE XV.6

*Changes in Policy on Types of Labour
Employed for Traditional Wholesalers*

1) Did the introduction of SET in 1966 lead to a change in your policy about the proportions of different types of labour employed?

	Percentage reporting change ¹
Replace part-time by full-time	25
Replace part-time for whom SET is payable by part-time for whom SET is not payable	23
Replace adult male by adult female	14 (2)
Replace adults by juveniles	9 (2)

(2) Did the introduction of SET in 1966 lead you to pursue the policies stated below?

	Percentage answering 'Yes' ¹
Concentration on skilled rather than unskilled staff	25 (2)
Dismissal of staff beyond retiring age	16
Change in the use of self-employed labour, agents or sub-contractors	5

(3) Did the revised rates introduced in September 1967 for part-time workers employed for less than 21 hours cause you to make increased use of part-timers?

Percentage answering 'Yes'	15
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(4) Did the revised refunds for part-time employees and refunds for elderly employees introduced in September 1968 cause you to make:

	Percentage answering 'Yes'
Increased use of part-time employees?	12
Increased use of elderly employees?	5

¹ Figures in brackets indicate the percentage of firms making the opposite change in each case.

CHAPTER XVI THE EFFECTS OF SET ON WHOLESALER— MANUFACTURER COMPETITION

Like almost all taxes, SET involves anomalies in its working. So far as the distributive trades are concerned, the main reasons for the existence of anomalies are as follows:

(1) Although we have rejected in Chapter II the argument that SET constitutes an anomaly in its very nature, because it is 'selective', nevertheless any selective tax inevitably involves borderline problems and anomalies between something which is just included and something else which just escapes. In the distributive trades the main examples of this type of anomaly are probably in the field of industrial wholesaling, and are discussed in Chapter XIX; but there are plenty of problems even in the field of traditional wholesaling and retailing, such as the question whether the business which holds bananas for ripening should escape SET on the grounds that this is 'production', whilst the plain dealer in bananas has to pay. Any such differentiation makes an anomaly in the competition between firms on opposite sides of the fence.

(2) Eligibility for refunds of SET is determined on an establishment basis, as we have seen in earlier chapters: this means that where a majority of the employees at an establishment are engaged in (say) manufacturing, any employees at the establishment who are engaged in the work of distribution are *also* eligible for refunds, and in consequence the business is at an anomalous advantage compared with a plain distributor. Conversely, if the majority of the employees are in distribution, those engaged in manufacturing are not eligible for refunds (unless the 'split establishment' rule can be applied), so that the mixed business is at an anomalous disadvantage compared with a plain manufacturer.

(3) The tax is levied on the basis of the *numbers* employed, divided into certain very broad categories, but does *not* vary with the skill of the employee or his earnings. This produces an anomaly as between skilled and unskilled workers, and also between enterprises which adopt different techniques calling primarily for skilled workers or primarily for unskilled.

(4) A number of exemptions have been granted for reasons which have nothing to do with the nature of the activity in which the enterprise is engaged. Thus self-employed workers are exempted on the basis of their own status, so that enterprises in which they constitute a large part of the labour force are at an advantage compared with enterprises engaged in the same activity, but using essentially hired employees—a situation which frequently arises in the distributive trades. On the other hand, local authorities, charities and nationalised industries can usually obtain refunds for their employees, which involves anomalies where distribution is undertaken by employers falling within one of these classes.

(5) In the application of the law, administrative decisions have to be taken about its interpretation, and this may involve anomalies if different interpretations are given by different officials.

Anomalies of this kind may have two different types of effect. They may lead to less efficient methods being used, and these losses in efficiency must be set against any gains which have been secured through the stimulus to cost-saving discussed elsewhere in this report.¹ In addition, the anomalies may produce losses or gains to the owners of individual businesses, according as the position in their case is anomalously unfavourable or favourable: these effects will however frequently be of a temporary character only, whilst the industry is adjusting to the new situation, and it does include both gains and losses. Obviously, if it is possible to avoid or reduce such anomalies, then equity demands that this should be done, unless the costs involved in doing so are disproportionate. But we see no way of quantifying this item, and it seems to be essentially a political decision to decide how far costs should be incurred in order to improve the equity of SET, especially as nobody would claim that the economic system is free from other inequities, and businesses have to put up with (or enjoy the benefits of) many changes in economic conditions for which they are in no way responsible and which they cannot predict.

COMPETITION BETWEEN WHOLESALERS AND MANUFACTURERS

Probably the most widespread and serious anomaly connected with SET is the one which arises when manufacturers and wholesalers are in competition.² In large measure, this type of problem is an inevitable consequence of starting from the basic principle that employees in an establishment are all liable to SET, or else all exempt, according to the main activity of the establishment—but the position is decidedly complex, and at the risk of some over-simplification it seems important to explain why this type of competition creates such serious anomalies.³

We may start with the case where a manufacturer does some distribution work from what is essentially a factory. To obtain refunds for the employees at that factory, he must first establish that he is correctly to be regarded as a manufacturer, rather than as a distributor of goods bought from other producers.

¹ For making practical decisions about any change in taxation, it is of course necessary to compare the position under SET with the position under possible alternative taxes, which may or may not produce cost-savings by their general operation, and which will normally have their own 'anomaly' problems.

² The anomalies which arise from the competition between *industrial* wholesalers and manufacturers, which are amongst the most serious, are discussed in chapter XIX and only incidentally in this one.

In the course of this section the word 'manufacturers' should be taken as covering other producers who receive refunds of SET, such as the producers of poultry. The competition between such people and the relevant wholesalers raises just the same issues as competition with manufacturers.

³ SET also put multiples which carry out wholesaling functions for themselves at a disadvantage compared with manufacturers. The introduction of SET may result in the diversion of deliveries direct to shops and it produces an anomaly between retailers who acted as their own wholesalers and retailers who obtained deliveries direct to their shops. If a multiple which acted as its own wholesaler continued to do so after the introduction of SET its costs will be raised compared to firms which have deliveries from manufacturers direct to their shops. Alternatively if a multiple changed to direct deliveries it lost any cost advantage it enjoyed compared to competitors who had not organised their distribution in this way.

In some cases there is vertical integration, with manufacturing and retailing being performed by a single company. Such a company is likely to be able to obtain refunds for employees engaged in distributing goods to its shops. Again these manufacturer-retailers will be at an anomalous advantage compared to multiples which act as their own wholesalers and retailers who obtain supplies from wholesalers.

Broadly speaking, he can do this by showing that more than half his employees are engaged in connection with producing goods which he has made (this includes employees who sell the goods), rather than distributing the products of other firms, and as a rule this test presents little difficulty if the establishment really is a factory.

If this test is safely passed, the manufacturer must also show that not more than half the persons employed are employed wholly or mainly in non-qualifying activities, i.e.:

(i) Activities carried on for office purposes.

(ii) Activities by way of the sale of goods.

Even if the extent of manufacturing is rather small, and even if the establishment is carrying out a nation-wide distribution of the goods, this test is not a very strict one, because (for example) many of the people in the warehouse, at the factory, or driving lorries attached to the establishment, are not engaged in non-qualifying activities. Hence it will normally follow that a manufacturer obtains exemption for all employees at his factory, even though a good proportion of them may be engaged in activities essentially similar to those carried out by wholesalers, and even though the manufacturer may also be distributing some goods bought from other producers.

One further point is perhaps worth making. If the manufacturer is unable to comply with one or other of the two tests, he will normally be able to ask for his establishment to be split for SET purposes, so that he obtains refunds for the 'factory' part of the establishment—and he will normally be able to arrange for this to include quite a lot of distributive workers without failing on either of the two tests. It is true, of course, that a wholesaler who carries on some productive operations may be able to ask for his establishment to be similarly split, but for a variety of reasons (including the treatment of the transport department, discussed below) this is usually more difficult.

Manufacturers' Warehouses etc.

We now consider the position of the manufacturer who has separate establishments from his factory—e.g. warehouses or distribution depots, or wholesale departments distributing the products of other manufacturers as well as his own output. One might perhaps have expected that these separate establishments would be classified for SET purposes according to the activity which went on at those establishments, rather than according to the over-all nature of the owner's business, but this is not what the law says.

Where a manufacturer is operating an establishment of this kind, the first question is whether it should be treated as a 'manufacturing' establishment or (for example) as a wholesale establishment, and the test is whether more than half of the staff are mainly employed in handling goods manufactured by the owners of the establishment (even though they were manufactured elsewhere). As most of such establishments are mainly engaged in distributing the products of the parent factory, this test is usually passed, although it would of course rule out a general wholesale establishment which had (for example) been bought by a manufacturer and was still mainly engaged in distributing goods produced by other firms.

If this condition is met, then refunds can be obtained for all the employees at this establishment, provided that the condition about non-qualifying activities (set out above) is also met. Even though nothing is actually manufactured at the

establishment, this seldom presents great difficulties, because a great many workers are classified as 'not non-qualifying'—e.g. the bulk of the warehouse and transport staff. In an extreme case, one would thus arrive at the position that the whole staff of a manufacturer's distributive establishment would be exempt from SET, even though no manufacturing was done there at all, if his staff were allocated as shown in Table XVI.1.

TABLE XVI.1 *Extreme Case in which a Manufacturer's Warehouse is Exempted*
(The figures give the percentage allocation of the labour force)

	Selling and Office Staff	Transport Workers	Other Workers	Total
Handling own goods	25	10	16	51
Handling other goods	24	10	15	49
Total	49	20	31	100

The effect of these rules was summarized for us by officials concerned with the working of the tax in a general statement that 'in practice manufacturers' warehouses etc. are nearly always exempt'.

To be on the safe side, however, we took advantage of the questionnaire which we sent to a number of manufacturers to ask about the SET position for their employees engaged in selling and distribution, and the question which was put (and is reproduced in Appendix B) might have been expected to elicit all cases where they had to pay SET. In fact, some eighty manufacturers reported that they made sales direct to retailers (whether through a separate establishment or not), and only thirteen claimed that they did not get back all the SET which they paid. Moreover even with these thirteen it was usually clear that they gained a substantial advantage in their competition with wholesalers, because only a small part of their trade was affected. Even ignoring their sales to wholesalers (where the issue did not arise) there was only one case in which more than 40 per cent of the firm's sales went through a distributive establishment which was liable to SET, and in seven cases the proportion was under 10 per cent. In effect, therefore, the manufacturers' returns confirmed what we had been told by officials.

The Position on Transport

Apart from this surprisingly favourable treatment of the manufacturers' distributive activities, competition between manufacturers and wholesalers is rendered more anomalous than it might be by the differences in the rules adopted in relation to refunds for their employees who are engaged in transport.

Since the commercial operator in road transport is exempted from SET, it is entirely reasonable that the transport departments of a factory should be exempt, even if they are at a separate establishment: either the establishment is regarded as a road haulier or it is regarded as part of a manufacturing business, and on either basis it should be exempt.

With a wholesaler, however, the rule is that the transport department is regarded as part of the wholesale business, even if the transport is carried out from a completely separate establishment (unless it does sufficient work for other businesses to constitute a commercial road haulier). This certainly has advantages in avoiding difficult border-line decisions about whether a transport department is sufficiently separate to qualify as a road haulier, which would arise if the test were simply 'separation', rather than 'working for other businesses'; but it leaves no scope for the wholesaler to bring his competitive position more into line with that of the manufacturer by establishing a separate transport department which would be exempt, although only handling his own goods.¹

The real crux of the anomaly lies in the conjunction of the rule that permits a manufacturer's warehouse, distribution depot etc. to count as a 'manufacturing' establishment, with the rule forbidding wholesalers to obtain exemption for their transport departments, even if they are operated by an associated company.² The only escape for the wholesaler is to have his goods carried by an independent operator, which in practice (as explained in the next chapter) has not proved attractive because of the loss of flexibility. The manufacturer's distributive establishment is exempt itself and so obtains exemption for its transport department, so that it can combine flexibility with exemption from SET.

ASSESSING THE EFFECTS OF THE ANOMALY

From the start of our study of distribution, we realised that we would have to seek information about the extent and effects of the anomaly which arises when wholesalers and manufacturers are competing, and that this would present difficulties. We aimed at assembling information for the following purposes:

- (1) To establish the extent and intensity of competition between wholesalers and manufacturers in various trades.
- (2) To enable us to assess whether this competition had become more intense since the first half of 1966, and if so how far this was attributable to SET.
- (3) To measure the effects of the anomaly within the period covered (a) in diverting trade from wholesalers to manufacturers; (b) in reinforcing the profits squeeze on wholesalers.
- (4) To get some idea about the longer-term consequences of the anomaly, and (if possible) the consequences of raising the rate of SET.

One main source of information was, of course, the questionnaires which we sent to wholesalers, and which are reproduced in Appendix B. Apart from the basic accountancy information, which showed for example how large an item SET is and what had been happening to the operating ratios of wholesalers, we had a special section at the start of the questionnaire about competition with manufacturers, and this was one of the subjects which was further explored in our interviews with selected wholesalers. Understandably enough, this was a topic on which our respondents were very willing to give information.

In addition, we sent a questionnaire to manufacturers (also reproduced in Appendix B), and followed this up with interviews. In this case the subject was one which clearly called for careful and delicate handling, and we would like to

¹ In the same way as printing departments operating for a business escape, even though they are engaged only in printing labels, brochures etc. for the firm's own use.

² This rule was in fact tightened up against the wholesaler by the 1969 Finance Act; previously, he could escape by having an associated company carrying his goods, which could qualify as a road haulier.

express our gratitude to the respondents for their very helpful replies. A major object of this questionnaire was to find out whether there had been changes in the extent to which their supplies reached the home market via wholesalers, and also to find out whether there had been any changes in the ratio between the price at which they supplied wholesalers and the price charged to retailers.

The Importance of Competition between Wholesalers and Manufacturer

The answers to the principal questions put to wholesalers, which dealt specifically with their competition with manufacturers, are summarized in Tables XVI.2 and XVI.3. Inevitably, the questions were somewhat imprecise on many points, some of which—e.g. as to the meaning of the word ‘serious’—are rather important, but we feel that they give a broad picture of the position.

TABLE XVI.2 *Traditional Wholesalers' Answers to Questions about the Existence of Competition Between Manufacturers and Themselves*

Trade	Is the Competition of Manufacturers (or Producers) serious for any of the goods you sell?		Are Manufacturers your main competitors for any of the goods you sell?			
	Yes	No	Nearly all the goods	More than 50 per cent	Less than 50 per cent	No ¹
Groceries	11	6	0	1	8	8
Frozen Food	4	0	4	0	0	0
Confectionery	9	0	0	1	6	2
Tobacco	10	0	7	3	0	0
Textiles and Footwear ²	27	0	4	10	12	0
Floorcoverings	9	0	6	0	3	0
Electrical goods and Hardware	27	7	1	3	20	10
Newspapers	3	10	0	0	3	10
Toys and Stationery	8	1	1	2	4	2
Total of above trades	108	24	23	20	56	32
Pharmaceuticals	9	0	This question was not put to firms in these trades			
Poultry	9	1				
Fruit and Potatoes	6	7				
Meat	2	4				
Grand Total	134	36				

¹ Firms which answered ‘no’ to the first question were not asked to complete the question asking whether manufacturers were their main competitors. These firms have been added to the firms which answered ‘no’ to the second question.

² One firm in this trade declined to answer the second question.

The first conclusion from these tables is simply that there is some degree of competition between manufacturers and wholesalers in all trades, and indeed that 134 out of 170 wholesalers considered that the competition of manufacturers was *serious* for some of the goods which they sold (Table XVI.2, left-hand half).

Secondly, the importance of the competition from manufacturers varies between trades, as may best be seen from the right-hand half of Table XVI.2. In some trades, most of the wholesalers regarded manufacturers as their *main* competitors for nearly all the goods which they sell.

Thirdly, the extent of competition with manufacturers varies according to the type of customer served, as well as according to the goods. For that reason, the questionnaire asked separately about competition in respect of trade with four main types of customer—multiples, other large retailers, small retailers, and 'other customers' (e.g. catering establishments etc.). The replies showed that all wholesalers encountered competition from manufacturers in respect of their sales to multiples and large retailers, and ninety-four out of one hundred and thirty-five wholesalers said that they encountered competition with manufacturers in supplying small retailers with at least some goods.¹ More importantly, however, forty-eight out of one hundred and thirty-five wholesalers considered that manufacturers (rather than other wholesalers) were their *main* competitors in supplying small retailers with these goods (Table XVI.3, right-hand half), and the position was broadly similar with the category of 'other customers'.

To provide some guidance about the importance of the various types of customer, the left-hand half of Table XVI.3 gives the proportion of the wholesaler's business with each type: it will be seen that trade with multiples is relatively unimportant, and that trade with small retailers *plus* other customers accounts for some 76 per cent of the total. This concentration of the wholesalers' trade on small retailers goes some way to mitigate the apparent importance of competition with manufacturers, but still leaves it as a major factor.

Changes During the Period

To find out whether competition has become more intense, we asked each wholesaler to state whether he considered that manufacturers had been gaining trade at his expense, taking each type of customer separately, and the answers are given in Table XVI.3. They showed a large majority of firms as considering that manufacturers had gained in respect of dealings with multiples and other large retailers, although it was noteworthy that a majority of the confectionery wholesalers said 'no' in respect of the other large retailers. On the crucial question of whether manufacturers had been gaining in respect of sales to small retailers, there was a small majority of wholesalers who said 'no'—though there were substantial majorities saying 'yes' for poultry and pharmaceuticals—and on a weighted basis the importance of the grocery replies gave a substantial majority to the 'No's'.

We also obtained valuable guidance on the shift of trade away from wholesalers, through our enquiries to manufacturers. The answers to the relevant questions are summarised in Table XVI.4, and suggest that, over the whole field, wholesalers lost about 4 per cent of their trade through switching between the different channels. The figures are, of course, far from ideal, but they are

¹ To avoid making the form impossibly complicated, these questions had to be confined to 'the type of goods for which the competition of manufacturers is most serious', and on average these goods represented about 55 per cent of the wholesaler's turnover

Pattern of Trade for Wholesalers and Competition of Manufacturers
(This table deals with the goods for which competition is most serious)

The proportion of your trade with:							Trade with small retailers ^{1, 2}		
Trades	Retailers				Other Customers	Per cent of firms answering 'Yes'	Are Manufacturers your <i>main</i> competitors?	Have Manufacturers been gaining trade? ³	
	National or Regional	Other Large	Other Small	Do Manufacturers compete?					
Groceries	4	23	66	7	54	23		9	
Frozen Food	3	10	25	62	100	100		50	
Confectionery	2	17	68	13	78	22		25	
Tobacco	1	12	71	16	90	60		50	
Textiles and Footwear	13	19	66	2	88	25		47	
Floorcoverings	3	17	74	6	100	89		57	
Electrical Goods and Hardware	5	20	40	35	54	18		28	
Newspapers	0	5	95	0	18	15		10	
Toys and Stationery	3	16	81	0	78	50		43	
Pharmaceuticals	12	3	76	9	100	86		75	
Poultry	16	18	59	7	78	44		67	
Fruit and Potatoes					Questions were not put to firms in this trade				
Meat					Questions were not put to firms in this trade				
Weighted averages	5	19	64	12	67	34		29	

¹ For the purpose of estimating the percentages shown in this part of the table it is assumed that the twenty-five firms in these trades which said that the competition of manufacturers was not serious for any of the goods they sold would have answered 'no' to these questions.

² These questions were asked about trade with other classes of customers besides small retailers, but there was less variation in the answers between trades, and so figures for trades are not shown separately. The (unweighted) percentages of firms answering 'yes' to the questions were:

Do manufacturers compete? Are manufacturers your *main* competitors? Have manufacturers been gaining trade?

National or Regional Retailers

Other Large Retailers

Other customers (Small Retailers)

100
100
84
85

93
85
62
44

76
79
45
46

These figures do not include an allowance for firms which answered 'no' to the question whether the competition of manufacturers was serious.

³ Ninety-seven firms answered this question.

based on quantitative returns from manufacturers, which most of them were able to complete without great difficulty.¹ (The questionnaire is reproduced in Appendix B.) It is of some interest to note that groceries is again in a somewhat exceptional position: the manufacturers showed a *greater* proportion of their goods going through wholesalers in 1968 than in 1965, just as the wholesalers showed an extremely small proportion of firms (only 10 per cent) saying that manufacturers had gained at their expense. The growth of cash-and-carry is a plausible explanation, though it must be admitted that the statistical basis is weak in each table.

All in all, therefore, our two approaches both point to a modest diversion away from wholesalers in this period, which we think of as 'under 5 per cent'.² We hasten to add that both approaches are concerned with the *historical record*, and not with the effects of SET by itself, or of the anomaly under investigation.

Reasons for the Change

There has of course been a historical tendency for the share of wholesalers in national trade to decline, largely associated with the growth of multiple shops, and some decline was therefore to be expected on that account. We sought however to use our questionnaires to wholesalers and manufacturers to explore other factors.

Wholesalers who said that they had been losing trade to manufacturers were asked to describe the methods used by the latter to increase their competitiveness (question 3(d)v of Section 1). This was clearly not an easy question to answer, but twenty firms mentioned the use of more travellers by manufacturers (our illustrative example) and thirty-eight reported 'better terms' in one form or another.

With the manufacturers, our main effort was to find out whether they had changed the relationship between the prices at which they sold to wholesalers and the prices at which they sold to retailers. This was not a very easy subject to explore, as the questionnaire shows, firstly because prices were changing for other reasons, and secondly because at any one date the prices charged to both wholesalers and retailers vary according to such factors as the scale of the order. However, we obtained very good cooperation from the manufacturers, and we established a clear answer on the crucial (if rather over-simplified) point: in very few cases had there been any increase in the percentage discount allowed to a wholesaler, as against the price charged to the retailer—whether to allow for the wholesaler's SET payment or for any other reason. Indeed, eleven manufacturers went further and said that they had made the terms to wholesalers *less*

¹ Although we have no reason to doubt the accuracy of the replies, it is right to point out that the sample was small and of an indicative character only. It was confined to large manufacturers, and it may be that small manufacturers continued to trade very largely through wholesalers; on the other hand the small manufacturers may have become a less important part of total production.

² We tried to obtain a third clue as to the shift in the channels of trade, by comparing the movement in wholesalers' sales, as recorded in our sample, with the movement in retail sales. This was clearly a very tricky operation, since our panel was not designed to provide measurements of wholesale trade on a national basis, but we hoped that some guidance could be obtained by confining our calculations to firms which did not take over or merge with other firms during the period. Unfortunately, however, it became clear that the uncertainties were too great to justify even tentative conclusions. The most that could be said was that the calculations did not give us any reason to depart from our previous conclusion.

TABLE XVI.4 *Changes in Wholesalers' Share of Trade, 1965 to 1968*
 Percentage of Manufacturers' Home Sales Distributed through Wholesalers¹

Trade	1965	1966	1967	1968	1968 as a percentage of 1965
Groceries	26.9	26.8	27.5	27.6	102.6
Confectionery	54.2	54.4	53.7	52.8	97.4
Tobacco	39.1	38.8	38.4	38.3	98.0
Poultry and Frozen Food	41.0	40.0	40.0	36.7	89.5
Textiles and Footwear	34.2	33.9	31.8	31.3	91.5
Floorcoverings	32.6	31.4	29.8	30.0	92.0
Electrical Appliances	64.2	62.2	59.1	55.6	86.6
Hardware and Pottery	44.7	45.6	47.1	44.6	99.8
Pharmaceuticals	57.5	58.9	58.5	57.6	100.2
Others	18.8	19.1	15.9	17.5	93.1
Weighted average ²					96.3

¹ These percentages are averages for the manufacturers who completed Table 1 of the questionnaire. They should not be regarded as a reliable guide to the proportion of the national trade in these goods distributed by wholesalers in any year, but serve as an indication of *changes* in that proportion.

² Weighted by the gross profits earned in 1965 by the relevant wholesalers. (The unweighted average of the respondent manufacturers' figures was 95.8.)

favourable, as compared with the terms to national multiple retailers—a move generally associated with the ending of resale price maintenance.

Our conclusions from this information are essentially simple. If the wholesaler had fixed his selling price by adding the old percentage for gross margin, he would have been keeping his price in line with that charged by the manufacturer—it would have been *equal* to it, if it was equal before, otherwise *above it by the old percentage*, to reflect the wholesaler's better service. The wholesaler's costs had however risen more steeply than the price of the goods, mainly because of SET. Hence—in the simplest case—he might increase his mark-up, so as to take account of the higher costs, and then report that the manufacturer was gaining trade by offering 'better terms'—as he would be, although the wholesaler's action might be regarded as the reason for it. Alternatively, if he kept his mark-up unchanged, he was less able to spend money on sales promotion and/or 'service', which might again be broadly regarded as consistent with the wholesalers' explanations.

The fact that the loss of trade by the wholesalers was *relatively small*, in spite of the historic trend towards direct manufacturer-retailing trading, seems to be partly accounted for by their increase in efficiency, partly by the enforced acceptance of a reduction in their net profit/sales ratio, and perhaps partly by the general tendency for retailers to continue to use their old suppliers, at least for a time, even when the service (or terms) had deteriorated.

Even if SET had not been increased, we would have expected the lower profitability of wholesaling to produce, as a long-run reaction, a contraction in the number of wholesalers and in the scale of their operation of a considerably greater size than anything experienced in the first two years of SET. In that

period, contraction in the number of establishments, so far as it was due to SET, was largely a matter of 'rationalisation', through mergers and the like: it enabled wholesalers as a class to do much the same amount of business as they would have done otherwise, with less use of resources (and giving a rather worse service), and at reduced profits. The further contraction which is to be expected will have a large element of 'replacement by manufacturers', who do not pay SET and have an artificial cost-advantage in consequence. This will be truly the effects of the anomaly, and will cause an addition to the national costs of distribution.

This is not, of course, a process which will go on indefinitely. There are great inherent advantages in the use of a wholesaler to assemble goods from manufacturers, sell them to retailers as part of a combined operation, and similarly make a combined delivery, including small quantities of many articles and brands. Even with the higher rate of SET, these advantages are likely to permit a recovery in the rate of net profits to be secured eventually, with a volume of trade which will still be substantial: the counterpart will in large measure be a rise in gross margins on types of trade in which manufacturers are ill-placed to compete, or a further reduction in service.

THE EFFECTS OF THE ANOMALY

In general terms we do not feel able to say more than that the small diversion of trade away from wholesalers, noted above as part of the historical record, is largely accounted for by other factors, and that the *short-run* effects of the anomaly in diverting trade has been very small. Nevertheless the effect would have grown with time, even if the rate for SET had not been increased.

This does not of course mean that the anomaly was unimportant in the period considered: it means simply that the major effect of the anomaly in the short run—like the effect of SET as a whole—has been on wholesalers' net profits and on their costs/sales ratios (excluding SET), rather than on the amount of trade done. We have discussed the effect of SET on the net profits/sales ratio in Chapter XIII, and we can only say that the anomaly played a major part in producing those effects, by keeping down the prices which wholesalers could charge.

If we look to the future, it is wise to get some idea of the additions to national costs of distribution which the anomalous treatment of wholesaler-manufacturer competition may cause, by diverting trade away from wholesalers in cases where the true costs of manufacturer-retailer dealing are higher. The figures are only illustrative, but they should give an idea of the sums involved.

First, we must work with the 1969 rate of SET, which is equivalent to some $5\frac{1}{2}$ per cent of the gross margin for traditional wholesalers. The effects of such a handicap may be taken, for illustrative purposes, as producing in the long run a diversion of 10 per cent of traditional wholesalers' trade to manufacturers: the case for using a higher figure would if anything seem more plausible than the case for using a lower one. This means a diversion of about £600 million of business from traditional wholesalers (measured at current prices and trade levels), on which the wholesalers' gross margin would be some £70 million.

The cost-differential (excluding SET) in favour of the wholesalers might, on this type of trade be taken as averaging half the handicap caused by SET—on the grounds that it was the SET handicap which caused the diversion, that even a minute handicap would have produced some diversion, and that some of the trade would have been retained if SET had been very slightly lower.

These figures combine to give an addition to costs of about £2 million (which is equal to half the amount of SET which the wholesalers would have paid if they had done the business). To get an idea of the increase in the real national costs of distribution (excluding SET) this may be compared with a *total* gross profit of traditional wholesalers of £700 million.¹

POSSIBLE CHANGES FOR WHOLESALERS

It is not, fortunately, within our terms of reference to make recommendations about changes in SET, or indeed anything else. Nevertheless, having concluded that the anomalous treatment of wholesaler-manufacturer competition is seriously inequitable and potentially damaging to efficiency, we feel under some obligation to look at various possible changes: they all involve considerations on both sides, so that a conclusion would be improper, but it may be helpful if we briefly review the issues.

Exemption for Wholesalers?

The anomaly could, of course, be tackled either by curtailing the scope for manufacturers to obtain refunds or by enlarging the scope for wholesalers. It is natural to start with the root-and-branch proposal of the EDC for Distribution that wholesalers should be exempted from SET.²

There are clearly many things which might be said in favour of this proposal, especially if one does not dig too deeply into the administrative problems of mixed businesses and boundary lines. Indeed, if one accepts—as seems to me inevitable, for reasons explained in Chapter II—that there is nothing inherent in being a service industry which automatically requires inclusion within SET, then one might reasonably say that the onus of proof was on the people who want to *include* wholesaling to make their case.

Some reasons for this view may be set out briefly as follows:

(a) Inclusion of wholesaling, coupled with the present treatment of manufacturers' distributive activities, creates a clear anomaly, which we have tried to portray. It involves both a shift of trade to less efficient channels (which was small in 1968, but is likely to grow) and an immediate loss of profits to the wholesalers.

(b) For purposes such as purchase tax (and, in the war, the Limitation of Supplies Orders) the dividing line has essentially been drawn at the stage of *supply to the retailer*, whether the goods come direct from a manufacturer or via a wholesaler.

(c) This matter is of concern to the small manufacturer, who has to sell through a wholesaler, as well as to the wholesaler himself: the small manufacturer is prejudiced if *his* channel to the retailer is taxed, whilst that of the large manufacturer goes free. Both equity and efficiency are involved.

(d) The matter is also of importance to the small retailer (as against the large retailer) and to people living in country areas (whose shops must use wholesalers) as against those in towns.

(e) The position of industrial wholesalers (discussed in Chapter XIX) involves particularly great anomalies: they are often working as taxed intermedi-

¹ One should perhaps add that the cost-differential of wholesalers might well have been put higher, on the grounds that each manufacturer has an incentive to sell direct, even when costs are higher in that way, because it provides an opportunity for pushing *his* products.

² See Economic Development Council for the Distributive Trades: *Selective Employment Tax in the Distributive Trades*; page 3.

aries operating between an untaxed manufacturer and an untaxed user (e.g. another manufacturer, or a farmer), either of whom might take over their function to escape the tax.

(f) Exemption of wholesaling as such would deal with the loss of competitive power in export markets caused by the fact that SET is a tax on export agents and on the export side of wholesalers' businesses generally; SET also encourages ship-owners to buy stores abroad, instead of from ships' stores merchants in the UK.

What, then, is to be said on the other side? First of all, of course, is the loss of revenue which any narrowing of the tax base would imply: with current rates of SET the complete exemption of wholesaling (defined as Minimum List Headings 810, 811, 812, 831, 832) might cost about £50 million a year.

This item has to be appraised by reference to whatever alternative is proposed. One such alternative would be, of course, to raise the rate of SET on the trades which were still liable, by about one-twelfth, so that the rate for a man would go up from 48s. to 52s. a week.

One does not escape the above issue by saying that the exemption should be made at a time when a reduction in revenue is desirable on general grounds: one could then compare the merits of exempting wholesaling, as against reducing the general rate to 44s.

Apart from this major matter—which reflects the fact that even the tax on wholesaling is primarily a creator of revenue rather than of anomalies—there would inevitably be a new crop of anomalies if wholesaling were exempted, to set against the ones which were removed. We do not pretend to have done much research on this, but would mention the following points:

(a) There is first the tricky question whether or not wholesalers should be subject to a test about the number of people on 'non-qualifying activities'. If wholesaling is simply treated like manufacturing, then a wholesaler would still be liable to SET if more than 50 per cent of his employees were engaged in office-work or selling: this rule does not cause much trouble to manufacturers' warehouses etc., because of the importance of their packers, transport operators etc., but an ordinary wholesaler has many more *selling* staff. For many brass-plate wholesalers, agents etc. a rule of this kind would nullify the exemption, and there might well be a great many awkward border-line anomalies: if the effect of the change were to divide the wholesalers down the middle, with some exempt and some still liable, one might well say that the importance of anomalies would have been increased rather than reduced.

If there is no such rule, however, the wholesalers would be put in a privileged position, and the scope for abuse would be much increased.

(b) In the case of coal merchants, builders' merchants and certain other distributors, the difficulty of drawing a line between a 'wholesale' business and a 'retail' business is so great that (broadly speaking) the Standard Industrial Classification puts them all in one category (MLH 831), with a saving clause for a few obvious retailers (e.g. do-it-yourself shops). We have assumed that the exemption would apply to everyone in this category, including the smallest hawkers of coal: any attempt to draw a line between coal retailers and wholesalers for SET purposes would certainly create violent anomalies in competition between businesses falling on opposite sides. Even so, the retail side of the builders' merchants (for example) would have an anomalous advantage against the do-it-yourself shops which would be taxed as retailers, and there would be other instances of competition with plain retailers of the same goods.

(c) Even outside the awkward category of MLH 831, many wholesalers (e.g. in the hardware business) have a retail department in a wholesale establishment, and indeed it is sometimes difficult to know whether a mixed business should be classified with the wholesalers or with the retailers. The retail departments of wholesalers would be at an anomalous advantage compared with other retailers dealing in the same goods, and one would expect them to grow both more numerous and larger (though growth would be limited by the need to keep down the number of people engaged on non-qualifying activities, if such a rule were maintained). Conversely, the wholesale departments of businesses classed as retailers would be at an anomalous disadvantage, unless they could apply the rule about splitting establishments.

It is not easy to judge the exact importance of this point and the preceding one, but it seems likely that complete exemption of wholesalers would create less anomalies *vis-à-vis* retailers than now exist in competition between wholesalers and manufacturers.

(d) Similarly where wholesalers have—or develop—other services as sidelines there would be anomalies in competition with the people who rely on that business only (who already have to put up with the side-line activities of manufacturers). If there is no restriction on the number of office-workers, a wide range of side-lines would be available, all having some connection with the main business—e.g. market research, direct mail advertising, the provision of credit and financial services to retailers. The only restriction would be the need for the establishment to remain classified as a wholesaler—i.e. to have more than 50 per cent of the employees engaged in that work.

(e) Quite apart from the development of new side-lines, wholesalers are not very easy to define when they do not handle goods, or only do so occasionally. Not only is it hard to draw the line, but those who are placed within it are in anomalously close competition with others who fall outside, whilst meeting the same need (e.g. for export finance).

(f) Problems would also arise over the central warehouses of multiple retailers, and similar establishments which fulfil functions analogous to part of a 'wholesaler's' activities. These would doubtless be regarded as still liable to SET, but there is a rather fine line, in economic terms, between a 'voluntary group wholesaler' (which would be exempt) and the central management and warehouses of a multiple retailer (taxable).

Exemption in Special Cases

If the decision goes against a general exemption of wholesalers, one can consider various special cases which have been suggested. Some of these rest on the idea that traders in specially 'essential' commodities should be exempted, usually because their 'essentiality' has been recognised by exemption from purchase tax—e.g. food, or pharmaceuticals, or newspapers, or books. Such proposals have to be judged essentially by reference to the considerations of equity discussed in Chapter II, and are only incidentally relevant to this chapter, insofar as they would remove the manufacturer-wholesaler anomaly over part of the field. In consequence I have only three very obvious points to make: firstly, the concessions would clearly be very expensive in terms of revenue, especially as they imply a corresponding exemption for retailers of the same goods; secondly, they would raise acute problems of definition (since many businesses deal in both food and non-food, for example, particularly in the retail field); and thirdly,

they would create formidable anomalies in competition between the straight-forward dealers in goods which did not get onto the list and the side-line sales of exempted traders.

A second class of suggestions rests on the idea that whilst it may be right to tax the distribution of consumer goods, there is little or no case for taxing the distribution of industrial materials, machinery and the like (thereby raising the costs of manufactured goods, including *inter alia* those which are exported or which compete with imports) and no case at all for taxing the reclamation trades, which are effectively producers of raw materials. This class we leave over for discussion in Chapter XIX, on anomalies as they affect industrial wholesaling.

Other suggestions centred essentially on questions of international trade and payments. The British Export Houses Association made early representations to us, and sent out a questionnaire which their members were invited to return to us. It was apparent that their members played a variety of roles in relation to British exports and/or entrepôt trade, and they complained in particular:

- (a) That the smaller exporters who worked through them were penalised in competition with larger manufacturers who exported direct and so escaped SET.
- (b) That SET was a substantial levy in relation to their profit, that it was usually impossible to raise their commission in the face of international competition, and that this resulted in the loss of substantial exports which it did not pay them to organise.

We also received representations on behalf of the ships' stores traders (which carry a highly varied stock of goods in order to make immediate deliveries to ships whilst they are in harbour), in which the really powerful argument rested on the role of international competition: it was argued that the question whether ships got their stores in (or from) the UK or from foreign sources turned on a close comparison of costs, and that in a good number of cases the payment of SET was turning the balance in favour of foreign supplies.

We have not attempted to assess the quantitative importance of these matters, or to arrive at a ratio showing the gain of foreign exchange for each £1 million of SET which would be foregone if the relevant businesses were exempted. The task might well have been beyond our powers, but we felt inhibited from trying by the statement of Treasury officials that the remission of SET on service trades where the service is directly linked to the export of goods to EFTA countries and where the entitlement to exemption is related to the amount of export business would be contrary to our EFTA obligations and could well lead to difficulties in the GATT so far as exports to other countries are concerned. We were also acutely aware of the fact that if the difficulty with GATT could be overcome in some way, and if the principle of exemption on such grounds were once accepted, then many kinds of business outside the distributive trades would want the principle applied to them. We have not for example, started consideration of civil engineering consultants or 'City' firms working largely for overseas customers, and we are in no position to consider the ramifications of the problem or the formidable difficulties involved in devising and administering the necessary definitions.

So far as this Report is concerned, therefore, we can do little more than point out that the issues are certainly important, and that the question of seeking a waiver from GATT lies outside our province. The only separable point which we feel able to make is that it should not be impossible to devise a definition of the ships' stores trade which centred on the fact that these businesses are essentially

engaged in supplying ships with things needed for their voyages (including coastal voyages). Such a definition need, so far as we can see, involve no problems with GATT, and exemption of such businesses would have a certain logic, in so far as shipping is itself exempt. It also avoids the anomaly of the ship-owners escaping SET where they are big enough to run their own supply system.

In making this observation we fully recognise that it is not for us to judge whether it would be wise to open a Pandora's box full of applicants for comparable treatment, by giving an exemption to ships' stores dealers.

Wholesalers' Transport

Apart from the possibility of complete exemption for wholesalers (with or without a rule about 'non-qualifying activities') it is also necessary to consider possible 'alleviations'. The only one which was put forward at all seriously to us related to transport, and has been discussed above. It implies that two principles should be accepted:

- (a) A goods transport establishment should qualify for refunds as such, no matter who owns the goods which are carried, or who made them.
- (b) Wholesalers should be free to apply for their establishments to be split for SET purposes between a transport establishment and a wholesale establishment, subject to the usual rules (about separate organisation etc.) which have to be met before establishments can be split.

There can be no doubt that this would create some awkward problems about 'separation', and that a good number of wholesalers would be unable to pass the tests unless they were applied very leniently. Moreover the rules would affect other traders as well as wholesalers—it would be very difficult to confine the second principle to wholesalers and exclude, for example, the transport departments of large multiples. But when commercial hauliers are exempt from SET there is good logic in favour of at least accepting the first principle, and if this is done it is hard to refuse the second.

POSSIBLE CHANGES FOR MANUFACTURERS

Even if there were no difficulties in meeting the anomaly problem from the side of the wholesalers, it would be right to review the advantages and disadvantages of various possible ways of stiffening up the rules about refunds for manufacturers; once again there are always points to be made on both sides, so that it would be improper for us to come to any conclusions.

In each case there is of course the advantage that the broadening of the tax base would yield an increase in revenue, which would permit some corresponding tax remission—possibly by reducing the general rate of SET. This point is sometimes of considerable quantitative importance, and failure to repeat it on each occasion reflects simply a desire to save space.

Radical Change of Principle?

Starting with the most radical ideas, we considered such major changes as confining the refunds strictly to an occupational classification designed to cover only 'producers', or dividing each manufacturing business into two parts—a manufacturing part and a services part—and confining the refunds to the former; the latter provision would correspond more nearly with the traditional tax principle of taxing certain goods or services, whoever produces them, and

irrespective of what else is done at the same establishments, rather than following the 'major activity' principle of taxing everything that is done at some establishments and exempting others altogether.

Without attempting to set out all the arguments here we report our conclusion that the administrative problems were so great as to make further analysis unrewarding. Apart from anything else the logic of the second idea requires a separation of other services as well as the distributive one—presumably including all services which a manufacturer *might* get done for him by a specialist firm, but might (and commonly does) choose to do for himself, at least in part. Moreover the rules would presumably be of general application, and so would apply to firms largely engaged in export work.

We do however wish to note one half-way-house, which would admittedly present administrative difficulties, but which might be explored if there were a strong political will to take action. This would be to build on the present rule about people engaged in non-qualifying activities (broadly sales staff and office staff). Manufacturers already have to satisfy DEP that these are 50 per cent or less of their employees, and it might be provided that this proportion should be recorded each year (or each quarter), and a corresponding proportion of the manufacturer's employees declared ineligible for refunds until the next ascertainment.

Clearly there is much more work involved in arriving at (and verifying) an ascertainment which will affect the refunds actually paid, rather than testing whether the percentage is 50 or under—which will in many cases be obvious—and the incentive to artificial rearrangements of staff will clearly be increased. There is also a great deal of rough justice about the approach—but the present method involves clear *injustice* so far as competition with wholesalers is concerned. Moreover there will be some impact on the costs of manufacturers serving the export market or competing with imports.

It would of course be possible to ease all the above problems by providing that the manufacturers' refunds would not be affected if the proportion of people on non-qualifying activities were less than (say) 10 per cent and that where it is higher the first 10 per cent would be disregarded.¹

Manufacturers' Distributive Establishments

If we turn to the idea of less fundamental changes in the rules, the most obvious field for consideration is the set of provisions relating to manufacturers' distributive establishments which are not located at the factory.

Perhaps the simplest proposal would be to say that in future the classification of an establishment should depend on the activities which take place there, without regard to the question of who owns it, or what other businesses the owner may pursue elsewhere. A distributive establishment owned by a manufacturer would then cease to qualify under manufacturing, unless more than 50 per cent of the employees working there were actually engaged in work on things manufactured at that establishment (including the work of selling them). It might,

¹ We also considered the possibility of relating the proportion of employees declared ineligible to the percentage of the manufacturer's sales going to retailers, since these sales are the root cause of the anomaly *vis-à-vis* traditional wholesalers. But apart from the complications involved, this would not cover the anomalies *vis-à-vis* industrial wholesalers, which may be even more serious, and we see no way of getting even a rough solution to the problem of framing a general definition of the classes of purchasers to be covered.

of course, be classified as a transport establishment, if the work were mainly of that character, and it would be logical for the revised rules to provide that it would then be exempt (as stated above in relation to wholesalers). If, however, the work were mainly distributional in character, then the establishment would be liable to SET in the same way as a wholesale establishment.¹

If the decision should go against the principle of classifying an establishment solely on the basis of the activity which goes on there, one can also consider the question whether a manufacturer's distributive establishment is to be regarded as coming under 'manufacturing', even if it is quite largely engaged in an ordinary wholesale business in other people's products. The position in this respect was described earlier in this chapter, and one might consider limiting the amount of trade in other firms' products to a maximum of (say) 5 per cent, rather than 50 per cent—the justification for having some small let-out being that it is often sensible for the manufacturer's establishment to handle a small trade in accessories etc. which go with his basic products. If it were possible to confine the trade in products of other firms to goods of this kind, as well as having a limit of 5 per cent, so much the better: it is hard to think of any good reason why a manufacturer should be able to get SET refunds for an establishment in which no manufacturing is done, on the grounds that it is nevertheless a manufacturing establishment, and yet be free to do *any* 'ordinary' wholesaling from it in competition with wholesalers who pay SET.

It must, of course, be recognized that any measures which limit the exemption of manufacturers' warehouses etc. are liable to affect the costs of exports which pass through them, or of goods competing with imports on the home market. In addition, if distributive activities conducted from the factory continue to escape SET (so long as the manufacturer keeps within the permitted 50 per cent of employees on non-qualifying activities) any change in the rules about his distributive establishments will give him some artificial incentive to do the work from the factory, rather than to set up a regional warehouse. On the other side, however, the exemption of manufacturers' warehouses gives the large manufacturer an unjustified advantage as against the small one, who has to sell through wholesalers, and the manufacturer who is deterred from setting up a regional warehouse by the removal of its anomalous advantage is in no worse position than the manufacturer who deals through wholesalers. Two blacks do not make a white.

THE POSITION OF THE WHOLESALER

One last point is perhaps relevant to decisions about tackling the anomaly which SET creates in competition between wholesalers and manufacturers. It is quite simply that many wholesalers clearly have a very profound feeling about the injustice of the present position, which threatens both their profits and their trade, and for which no rational justification can be offered other than 'administrative difficulties'. This feeling is intensified by the fact that SET is one of a number of developments which have worked out to the wholesaler's detriment, whether or not they were good for the nation. On every matter the outcome always seems to be 'the wholesaler loses'; that may not have been

¹ It would be necessary to decide whether the work of preparing and despatching consignments of goods held in a central warehouse, on the instructions of the manufacturer, should be regarded as 'distribution' or as 'transport'; in this connection it is pertinent to add that warehouses as such are liable to SET.

the intention, but on occasions insult is added to injury by such things as the unfortunate tone of paragraph 4 of the White Paper announcing the Selective Employment Tax.

More specifically, we might note the following points in connection with SET itself:

(a) The treatment of manufacturers' distributive establishments has resulted in their being exempt in many cases, even where they are also engaged in selling other firms' goods: a distributive activity, which would be taxable if carried out by an independent wholesaler, has been artificially classed as part of manufacturing, and exempted.

(b) By way of contrast, the wholesaler is unable to get exemption for a separate transport establishment, even though goods transport is itself an untaxed activity: the rules on this were actually tightened up by the 1969 Finance Act.

(c) One reason for treating manufacturers generously has been stated to be the need to keep down their costs when competing in export markets: but any suggestion that the concession should be extended to independent export agents is met with the reply of '*non-possumus*', so that the export agent is handicapped by SET payments not only in competing with foreigners, but also in competing with the British manufacturer who exports direct.

(d) When SET was increased in 1968, wholesalers and others subject to anomalies were told that the effects of these were being investigated, but the tax was raised again before our Report could be completed. Whilst it is clearly right that the Government must be free to act in the light of the best information which is available to it at the time, this rise was nevertheless regarded by many wholesalers as a virtual breach of faith—as we found to our cost when trying to obtain information for our enquiry.¹

Outside the field of SET the sort of factors mentioned to us were as follows:

(a) Wholesalers are unable to obtain investment grants for plant and machinery, even though manufacturers who are competing with them can obtain these grants not only for their productive machinery, but also for equipment used for storage purposes, packing etc., where the manufacturer is in direct competition with the wholesaler.

(b) The abolition of resale price maintenance has made things very difficult for a number of wholesalers.

(c) The Prices and Incomes Policy has, it is claimed, been administered in a way which has led to the control of various wholesalers' margins, on which control is relatively easy to enforce, as compared with the difficult task of controlling manufacturers' selling prices.

(d) A number of wholesalers complained that manufacturers offered better terms to national multiples than they do to wholesalers, even where the latter were placing as large orders, and that manufacturers offer large retailers disproportionate price concessions if they will accept large deliveries, as a means of securing the orders for their products.

¹ We have reproduced in Appendix I the letter which the Chancellor of the Exchequer sent us about this increase in the rate of SET. We sent copies of this letter to firms, but some of them refused to complete our supplementary enquiry, adding their views about the Chancellor's letter in terms such as 'nauseating' or 'hypocritical'.

CHAPTER XVII MISCELLANEOUS ANOMALIES AND THEIR EFFECTS

This chapter aims at describing and discussing various other anomalies in the working of SET, apart from the major one discussed in the previous chapter.

TRANSPORT

As the question of wholesalers' transport arose more than once in the previous chapter, it may be easiest to start by disposing of the other aspects of this question, although in fact it does not seem to be of major importance.

As explained already, commercial transport organisations receive refunds of SET, and distributive organisations do not: this might be expected to result in distributors having more of their sales delivered by specialist transport firms, instead of delivering the goods themselves, and also getting specialist transport firms (or the manufacturers) to convey goods to them which they might otherwise have collected themselves. There is some scope for this to happen in the retail trades, where, for example, specialist delivery services operate in a number of towns, mainly to serve retailers who have no proper delivery service of their own: one might expect that SET would give some stimulus to the growth of these services. The matter is, however, clearly of much greater importance to wholesalers, and for that reason we devoted a section of our questionnaire to the subject, and explored it further with wholesalers in the course of interviews.

Table XVII.1 summarises the main answers which we obtained to our questions about wholesalers' transport costs. The first column shows that these represent quite a substantial part of the wholesalers' gross margin, but one which varies substantially between trades: for wholesalers of perishable foods transport costs represented some 38 per cent of their gross margin, whilst within the groups shown in the table the percentage for frozen foods wholesalers was 33 per cent and for newspaper wholesalers 25 per cent.

The second column shows the amount of SET paid in respect of transport workers as a percentage of the wholesalers' total transport costs, and the third column relates it to the firms' *own* transport costs. The difference between these two figures is, of course, much affected by the extent to which wholesalers get their transport done by the railways, the GPO, or commercial hauliers—each of which is important in at least one trade. As a broad generalisation, it will be seen that SET in 1967–8 represented about $3\frac{1}{2}$ per cent of the wholesalers' own transport costs. With the increase in the rate of SET (but allowing for the rise in other costs) the proportion now might be some $6\frac{1}{2}$ per cent.

Although SET raises wholesalers' transport costs quite substantially, we obtained very little evidence of wholesalers having changed their policy in the direction of putting out more transport to transport organisations. Our questionnaire called on wholesalers to show (in Table 2) the transport costs in 1967 under various headings, and to fill in a second column for 1965 'if you have made any material change in your policy about using your own transport for delivery between 1965 and 1967'. Only about 25 per cent of the wholesalers completed this second column, and in a number of cases the figures did not suggest

any real change in policy, whilst the remainder showed more cases where the percentage of transport obtained from other organisations had *fallen* between 1965 and 1967 than cases where it had risen.

TABLE XVII.1 *Transport Costs* for Wholesalers, 1967-8*

	Transport Costs as a percentage of gross margins	SET as a percentage of total transport costs	SET as a percentage of own transport costs
Traditional Wholesalers	12.8	2.95	3.57
Perishable Food Wholesalers	37.6	1.46	3.44
Industrial Wholesalers	16.7 ²	2.29 ³	3.04 ³
<i>Traditional Wholesalers</i>			
Groceries,			
Confectionery,			
Tobacco	15.0	3.45	3.59
Textiles and Footwear	7.3 ¹	1.27	3.68
Electrical Goods			
and Hardware	11.2	3.09	3.60
Other Goods	18.5	2.90	3.16

* The figures include payments to outside enterprises for transport put out—see the form in Appendix B for details—but they understate the importance of transport costs inasmuch as they do not include such elements as the costs of administration and clerical work associated with transport.

¹ The percentage for Textiles and Clothing is taken from the Textile Distributors Association data for 1967.

² The percentage for Agricultural Merchants and Woollen Merchants are taken from S. L. Edwards, 'Transport Costs in the Wholesale Trade', *Journal of Transport Economics and Policy*, September 1969.

³ The figure includes only Scrap Metal Merchants, Steel Stockholders, Engineering Distributors and Builders' Merchants.

We also pursued this question in our interviews, from which it appeared that the advantages which the wholesalers had been obtaining from delivering goods themselves were so great that the increased cost caused by SET was not sufficient to induce them to change their practice. This seems an entirely rational view, when one considers the elements of security, guaranteed delivery, reduced need for packing, and general control of the service; it may be however that the higher rate of SET will lead to some policy changes in future, if only at the margin of a firm's business. Apart from anything else, the passage of time brings additional occasions when a wholesaler must decide whether or not to increase his fleet of lorries, or to refrain from replacing one, so that delayed effects might have become visible even if the rate of SET had not been raised.

Up to the end of 1967-8, however, our conclusion was that the anomalous differentiation of treatment between transport owned by a distributor and transport run by a haulier had not caused a significant diversion of work to transport organisations, and so had had no effect on the efficiency of the system.

SET is paid by the inclusion in the National Insurance stamp for all *employees* of an amount corresponding with the rate of SET for that category of worker (adult male, adult female etc.); no corresponding addition is made to the National Insurance stamp for self-employed workers, so that they are automatically exempt, whether or not they pay National Insurance contributions at all. (Many married women do not pay, and there is naturally some evasion by people who should pay—just as there is doubtless some evasion by employees.) This means that all sole traders and ‘partners’ (including people who are treated as partners, whether or not there is a formal partnership agreement) are exempt, and so are certain directors of companies, where their contracts include appropriate terms.

This issue is of considerable importance in distribution, as there are over 500,000 self-employed workers engaged in distribution on a whole-time or part-time basis. If all these workers were made to pay SET, the extra revenue might be about £50,000,000, but the amount which would be collected simply by raising the cost of a National Insurance stamp for a self-employed worker would be substantially less than this, for three reasons: firstly, married women are legally entitled to do without National Insurance cards, and most of them exercise this option; secondly, many of the part-timers in distribution are double-jobbers, who meet their National Insurance obligations as part of their main employment; and thirdly, whatever the scope of evasion may now be, it would be likely to increase if the cost of the stamp were raised in this way.

It is well known that self-employment is also important in various other trades which are liable to SET, notably construction, and the proper place for a full consideration of the treatment of self-employed is therefore in our Final Report, when we would be able to review all the evidence which we had accumulated. Nevertheless, this issue is one on which general economic analysis can contribute a good deal over and above what we have already learnt, so that a preliminary review of the issues seems desirable.

Logical Presumption against Exemption

On general economic grounds the presumption against confining the tax to employees is extremely strong, and the general arguments have to be weighed against the relevant considerations of administrative difficulty or social considerations. Very briefly, the economic presumptions in favour of including the self-employed may be set out in the following (slightly overlapping) points:

(a) The amount of revenue foregone—even allowing for difficulties of collection—is substantial: the general presumption in favour of widening the tax base and lowering the rate of tax is quantitatively important on this issue.

(b) Unless we are to change to a fully-planned economy, the mainspring of our system is reliance on the market mechanism to sort out the more efficient ways of using our productive resources from the less efficient, and this system requires that the tax-treatment of different methods of conducting operations should be as nearly equal as possible. Consequently, any tax which imposes a substantial cost on one method without imposing a corresponding cost on another is liable to lead to an inefficient choice of method, unless it can be clearly shown that this differential handicap is a good counterpart to a differential advantage which some other tax gives to the first method.

As applied to SET and the distributive trades, this means that SET encourages the use of small shops run by the proprietor and his family, with perhaps one or two employees, as against shops which would offer better value for money if they were not differentially handicapped by SET.¹

(c) The basic idea about 'fairness' in competition between different types of traders calls for equality of tax-treatment of the labour force in each enterprise *in fact* and not merely the application of the same rules.

(d) Insofar as SET is designed to give a stimulus to cost-saving in the enterprises which are taxed, or the use of capital in place of labour, there is no reason to exclude those enterprises which are manned wholly or mainly by self-employed people.

(e) Differential treatment of the self-employed and the employee naturally stimulates purely nominal changes of status, which not only prevent the collection of revenue, but also intensify all the factors mentioned already, and may have unfortunate side-effects (as the Phelps-Brown Report showed in the building trade). The longer the anomaly exists, and the higher the rate of SET, the greater the 'avoidance' effort becomes.

Social Considerations

As against this, the economic and social arguments in favour of maintaining the exemption for self-employed people—which can be considered equivalent to a subsidy—seem to be rather weak. The main ones which we have encountered are as follows:

(1) The self-employed include a number of people who for health or other reasons find it difficult to secure and retain a position as an employee, because the quality of their work does not come fully up to the level which an employer expects, but who can nevertheless make a modest living on a self-employed basis. It is then argued that such people should not be taxed under SET because their income is so modest.

The difficulty with this argument is that the exemption for self-employed applies to the wealthy partner in a firm of stockbrokers, just as much as to the barrow-boy suffering from indifferent health. Exemption of certain workers from SET, when others operating in the trade are paying it, is to be regarded as equivalent to a subsidy, and the case for indiscriminate subsidies to the self-employed gains rather little support from the fact that some of them are in difficult circumstances. This type of argument makes a much better case for relating SET to earnings, instead of having it on a flat-rate basis (a topic which is discussed below); it might also provide justification for special concessions in the income-tax to self-employed workers whose income is low.

Any concession given through the income tax would, of course, have the advantage that it would apply also to self-employed workers in trades which qualify for refund from SET: if the general objective is accepted one's first preference is for measures which help the self-employed in *all* trades—not only in building or distribution, but also in farming or fishing.

¹ One might well, of course, argue that SET itself handicaps the small shop as against the multiple retailer by its anomalous treatment of the wholesaler—see page 80 above. This argument has, indeed, some real validity, but it represents a rather dangerous attempt to show that two blacks can make a white: it does not, for example, dispose of the argument that the exemption of self-employed gives the family shop an undeserved advantage over a shop of much the same size manned by employees, which also has to get its supplies mainly from wholesalers.

(2) It is sometimes argued that the Government should encourage people to set up in business on their own, rather than relying on other people to run the risks of entrepreneurship.

This is a more logical argument, and many will feel that its attractiveness is enhanced by the fact that the subsidy which exemption from SET represents automatically grows smaller in proportion to the size of the business, as the latter increases. It is, however, somewhat paradoxical to confine this 'encouragement' to industries which effectively pay SET, and also to vary the amount of the encouragement every time that the rate of SET is changed. Action through income-tax again seems more logical.

(3) The third type of argument runs along the lines 'we like to have small family grocers serving us, rather than soulless multiples'.

This type of argument undoubtedly appeals to many people, but it is for consideration whether they should show their liking by patronising such shops, even if the prices are rather higher, instead of calling on the Exchequer to make a general remission of SET in favour of the self-employed, and so cause some tax rate to be higher than it otherwise might be.

Administrative Problems

This leaves the crucial question of administration, since it is obvious that the collection of SET from the self-employed would create formidable problems, and no decision could possibly be taken without a full assessment of the difficulties involved. On this we feel that our main discussion must be reserved for the Final Report, especially as the problems need to be considered in relation to the switch of National Insurance contributions to an earnings-related basis in 1972.¹

Under the present system, the most natural way of collecting SET from the self-employed would be to add it to the National Insurance stamp for that category as well as for the employees, which would mean that self-employed people who were entitled to opt out of National Insurance (e.g. married women) would still escape: this would have some compensations, insofar as it would be very difficult to apply the rules for partial refunds to married women who were working on a part-time basis, and the case for collecting SET from such people is not very strong, in view of the desirability of attracting them into the labour force. The present system would present certain difficulties over the payment of these partial refunds to people who *do* pay National Insurance, but the present exemption is equivalent to making a total refund to all self-employed, whether working full-time or part-time: a rather rough system for making partial refunds where they are claimed might well be considered preferable to the present system of administering the law perfectly and costlessly (because SET is not collected), but having the law on a basis which does not correspond with economic logic.

Information obtained from our Enquiries

Our most important contacts were with firms in which the proportion of self-employed workers to employees is negligible, and one might perhaps think that this would give a bias in the evidence which we collected towards views hostile to the exemption of self-employed. Similarly, it might be thought that Trade Associations largely represent firms with a small proportion of self-employed

¹ As the Chancellor announced in the House on 17th July, 'SET will then be collected by the Inland Revenue through the P.A.Y.E. machinery'.

workers, and that this would give a similar bias. In the event, however, it was clear to us that no such bias existed, and that indeed (for reasons discussed below) the main current of our evidence tended to under-state the importance of the exemption of self-employed workers.

Our main attempt to collect formal evidence about the importance of competition between ordinary businesses and those largely manned by self-employed people was in our questionnaires to the Trade Associations, the relevant question to the retail associations being 'Is it your impression that the proportion of business in your trade going to shops manned predominantly by self-employed people has increased as a result of SET?'. Most of the Trade Associations, both in the retail and in the wholesale part of the enquiry, replied in the negative, but nine of the twenty-four retail trade associations said that they did not know. Most of the wholesale associations added that the proportion of trade going to such businesses was negligible in their case, so that the question was not important.

Our general questionnaire to the traders themselves asked virtually nothing about the competition with firms manned by self-employed, except that there was a general question 'Are you selling in competition with traders who do not pay SET?': it appears that this was basically interpreted as referring to traders who were exempted for some special reason (e.g. a shop run by a charity), so that the replies throw little light on our problem. We did, however, have a final catch-all section entitled 'Comments', in which we invited firms to bring things to our attention which were not covered by the questions which had been put: this produced very few references to competition with the self-employed, but in the absence of a specific question this fact may not be very revealing, especially as our questionnaire was inevitably long. Unless a firm felt very strongly about the matter, it would be natural to avoid the work involved in volunteering comments on the subject.

Perhaps the most important qualification to the above statement is to be found in the observations put forward by the Parliamentary Committee of the Cooperative Union, which expressed considerable concern about the privileged position of the self-employed. They said 'Cooperative Societies are therefore faced by the unfair competition of self-employed roundsmen, taking their supplies of coal, milk, bread, etc. from other suppliers and who are at present relieved of the heavy cost of SET . . .'. The Committee also said that 'the Cooperative Union has received some disturbing reports of the switch to self-employment in certain trades such as milk, bread and coal delivery'. The emphasis in these quotations on *delivery* is explained by the contexts from which the quotations are taken: it is a reasonable inference that similar views would have been expressed about competition of the self-employed in other directions, although the problem might not be considered so acute there. .

Concern about the competition of the self-employed was also expressed to us by a firm which distributes coal on a large scale, with whom we were in contact over other matters. Our main evidence about the impact of competition from self-employed traders came, however, firstly from various types of industrial wholesalers—this is discussed in the next chapter—and secondly in the course of our interviews with the 'smaller retailers', from whom we obtained our information through interviews rather than on a postal form. As these interviews had to cover a great deal of ground and our informants were busy people,

it was not possible to spend much time on these matters; nevertheless in a significant number of cases the trader said that he regarded it as unfair that competitors who had no employees should be exempt, and that other competitors should gain a proportionately greater benefit than he did because a bigger proportion of their labour force was self-employed. This point arose largely out of discussions about the reasons why it was difficult for the trader to pass on the cost of SET in the form of higher prices.

In brief, we feel that the evidence which we have collected is quite consistent with the view that the exemption of self-employed workers not only represents a considerable loss of revenue (and hence creates a need for higher tax-rates) but also causes inequities and some distortions of the competitive process—although it provides little in the way of positive support for that view. Looking back, we can see that our methods of investigating the subject were not as well chosen as they should have been, and in particular that we ought to have devoted more time to this subject in our interviews with some of the smaller retailers. It is natural that the competition of the self-employed would be felt more keenly by the retailers who are somewhat larger, but doing much the same type of business, rather than by (say) the department stores or the supermarkets: the latter might almost feel that it was *infra dig* to raise the subject. There was more reason to get a reaction from multiples with a large number of small outlets—and indeed some of our interviews with these firms produced complaints about the keen competition of independent traders. But we did not explore the matter on our form as directly as we should have done.¹

Our questions to the Trade Associations were also unduly limited in their scope (see the form in Appendix B): we were perhaps unduly sensitive to the embarrassment which might have been caused to an Association by questions which might seem to be asking them to express support for the idea of extending SET to cover the working proprietors in their members' shops.²

Mail-Order Houses

A number of traders drew our attention to the advantages which mail-order houses have because they distribute through 'agents', usually housewives, who are not liable to SET because they rank as self-employed. It was also argued that mail-order firms deliver most of their catalogues and sales by post or by using a transport organisation which is exempt from SET, so that they have an indirect advantage against the channels of trade which involve the use of goods vehicles run by wholesalers and/or retailers; this latter point is, however, one which would need to be resolved—if at all—in terms of the general decisions about the treatment of transport, and will not be discussed here.

¹ It is perhaps relevant to say that we have had extremely strong representations (unsought) from large businesses running motoring schools about competition from self-employed instructors.

² We did try to find out how far the large retailers and wholesalers had avoided SET by changes in their use of self-employed labour or sub-contractors (see for example question 7(f) of the retail questionnaire in Appendix B). About 5 per cent of the firms in each case said that they had operated in this way, but the interviews generally showed that the scale of the switch was very small; a number of firms said that they had considered such a change and had decided against it because of the loss of control involved, difficulties with the legal definition of employment, and the reaction of employees and unions. We did not explore this matter with the smaller retailers, where the practice might well have been proportionately more significant.

The treatment of mail-order 'agents' for SET purposes is, *par excellence*, a question which cannot be usefully discussed without considering the basis for the collection of SET. So long as this is linked to the payment of National Insurance contributions, it is doubtful whether the extension of SET to cover self-employed would make much difference to mail-order agents: the great majority of these are either married women with no insurance cards or 'double-jobbers' whose payment of National Insurance is linked with their main job, and all these would be unaffected. In addition, a number of the rest probably work for less than twenty-one hours a week, so that two-thirds of their SET contribution would be due to be repaid.

If, however, one is looking ahead to the time when SET is to be collected as part of the income-tax system, and may well be related to earnings rather than to the worker's age, sex, and number of hours worked, the position would be radically changed. This is, however, a matter which we can do no more than mention.

For the time being, our conclusion can only be that the present SET system (taken to include the method of assessment, as well as the exemption for self-employed) does give an advantage to mail-order houses, but that most of this advantage would remain even if the rule were changed to require the addition of SET to the National Insurance stamp for self-employed as well as for employees. From the national point of view, one can also argue that there is something to be said for encouraging the use of a system which calls for a type of labour which would be unlikely to be diverted to other uses (whether within the service trades or outside them) if it were not used in the present fashion: but there is, of course, no particular reason why the scale of this encouragement should be equated to the amount which would otherwise be payable in SET.

Finally, so far as this sub-section is concerned, we should explain that it has had to be prepared with very little assistance from the mail-order houses. We intended to cover this type of distribution, and prepared a special form with the assistance of one firm which was extremely helpful; but the response to our questionnaires was so exiguous, despite many approaches, that we felt bound to ignore the returns which we received and report that our enquiry does not cover the field of mail-order houses.

THE METHOD OF ASSESSING SET

From the economic point of view, it seems to us much more natural that a selective tax on workers engaged in a particular group of industries should be related to their *earnings*, rather than being expressed as so much per head. The fixing of different rates for different age- and-sex categories does, of course, go some part of the way to relate the payments to (probable) earnings, and the inclusion of partial refunds for part-timers and elderly workers improves the adjustment; but it still remains a very crude one. It would seem highly preferable to replace the selective *employment* tax by a selective *payroll* tax, as might happen after 1972. Economic logic seems to call for the process to be carried further, so as to cover the earnings of the self-employed also.

Such a change would automatically deal with the problem of part-timers in the most logical way: it would, of course, be possible to have a complete dispensation for people earning less than £4 a week, but there seems to be no real reason for this complication, except possibly historical continuity. The great advantage of relating the tax to earnings is, indeed, that there are

no awkward 'steps', such as now exist at the level of £4 a week and of twenty-one hours.

Relation of the charge for SET to earnings also makes an automatic allowance for any tendency for elderly workers to earn less than those who are more useful and active. If, however, it were considered desirable to give the employer an incentive to retain or take on elderly workers—on the grounds that he would in practice have to pay them the standard wage—it would still be possible to have a special deduction from the SET payment, in the same way as special refunds are made now.¹

In brief, the adoption of a selective payroll tax (or a selective earnings tax) in place of a selective employment tax would give the tax more of the advantages claimed for a value-added tax, to which we have seen that SET already bears some resemblance (apart from its *selective* aspect). From the point of view of consumers, it is equitable that a tax of this kind would tend to raise the price of services produced by highly-paid classes of worker more nearly by the same percentage as the price of those produced by a lowly-paid trade.

Evidence from Trade Associations

We decided not to put a question to individual traders about the merits or demerits of replacing SET by a selective payroll tax, because their answers would inevitably have been influenced by whether they thought that such a tax would work out lower or higher in the particular case of their firm. We did, however, attempt to get the views of the various Trade associations (see question 9 on the specimen form for retail associations in Appendix B), but the question yielded few useful replies. Many Associations made it plain that they were opposed to a selective tax of any kind, and were unwilling in principle to express any views about the extent to which some variant of the present arrangement might be less or more objectionable than the existing system. Some Associations ticked the 'No' box to indicate that they would regard the change to a selective payroll tax as *not* being an improvement, but none of them supported this view with any arguments.

When we came to send out the questionnaire to Wholesale Trade Associations, we endeavoured to forestall some of the objections to the putting of the question by including in it a specific statement that it should be answered on the assumption that the same amount of revenue would be raised from members of their trade, so as to concentrate on the purely technical problems. This did not, however, prove very successful, and ten associations out of the twenty-eight who replied evaded the question in one way or another. Of the remainder, sixteen expressed opposition to the change, but no useful arguments were given for taking this view.

ANOMALIES WITHIN THE DISTRIBUTIVE TRADES

Anomalies occur within the distributive trades because some firms whose business is primarily distribution receive refunds for minor manufacturing (or other 'refund') activities, whilst other firms which perform the same function are unable to qualify. These activities are typically of a kind which is often performed by distributors as a side-line—e.g. retail bespoke tailoring, making of soft furnishings such as loose covers, making meat products such as pies,

¹ It would however be more logical to give the incentive to all trades, rather than only to those which pay SET—e.g. by letting employers pay less National Insurance.

sausages etc. in workrooms which form part of the same establishment as the shop—and the fact that some retailers are able to obtain refunds for the work done in these workrooms etc. gives them an anomalous advantage as against the retailers who cannot do so.

The reason for this differentiation springs from the conditions which have to be met before an establishment which is primarily engaged in distribution is allowed to divide off its 'manufacturing' activities, and obtain refunds for the people engaged in that part of the establishment. To be able to do this, a firm has to show that the distribution and manufacturing activities are:

1. Different in kind
2. Being carried out in separate parts of the premises
3. Separately organized.

It is quite understandable that the outcome of this test may differ as between two establishments whose economic activities are basically the same; it is also possible that some work of a distributive character may be included in the so-called 'manufacturing' part of the business, so that the successful retailer gains an advantage for his ordinary distribution as well as for the workroom activities.

In all, fifty-seven of the large retailers obtained refunds of SET on grounds of 'outside' activities (as opposed to refunds for part-timers etc.), and fifty-three did not. For most of the firms, however, it was apparent from the amount paid in SET as a percentage of the total payroll that their refunds were quite small, and this was also true generally of the nineteen wholesalers (other than industrial wholesalers) who obtained refunds, out of a total of one hundred and forty-four. Apart from the question of roundsmen (discussed below) we therefore concluded that the issues were not of much quantitative importance.

We also asked the retail trade associations 'Has the use of the establishment principle led to some of your members obtaining refunds of SET for all or some of their employees, while other members pay tax in respect of employees engaged in the same activity?', and to give some indication of the importance of any such cases (question 6). Ten associations replied 'Yes', seven 'No', and four did not know. The most commonly cited example was workroom activity, and the answers tended to confirm our impression that the issues were not of great quantitative importance.

Bread, Milk and Soft Drinks

A very awkward problem of differential treatment within the distributive trades arises in cases where bread, milk and/or soft drinks are sold by roundsmen on a door-to-door basis. Where the vendor firm is a retailer, selling goods produced by another firm, there is no question that his business is liable to SET, and that this covers the roundsmen as well as everybody else. At the other extreme, however, a baker selling his own bread direct from the bakery can claim that he is a manufacturer, and that the roundsmen are in employment carried out from his 'factory'. This does not automatically give him exemption from SET, since he still has to show that only 50 per cent or less of his total staff are engaged on 'non-qualifying activities', and it may well make all the difference whether the roundsmen are regarded as 'salesmen' (non-qualifying) or 'transport workers': if they are transport workers, he will certainly pass the test, whilst if they are salesmen he might have to fall back on asking for the division of his establishment into a factory (exempt), and a distributive section (taxable).

This question about the classification of roundsmen is also highly relevant to the case where the baker owns a shop from which bread is distributed which forms part of an establishment where bread is made. His business as a baker makes him a manufacturer and he is able to pass the test described in Chapter XVI because his employees in the shop and on bread delivery are employed 'in connection with' a manufacturing activity. This will not, however, help him unless he can also pass the test about staff engaged on non-qualifying activities, and for this purpose the classification of the roundsmen is again likely to be decisive.

Soon after the introduction of SET, officials of the Department of Employment and Productivity who were concerned with the making of refunds decided to treat bread roundsmen as transport workers rather than salesmen, on the grounds that they follow a pre-determined route and deliver pre-determined orders. It is no part of our job to consider whether this interpretation of the law is correct, although all members of our team agree that they expect their roundsmen to give them each day whatever bread they specify (even though some of them have a standing order which is to apply unless some variation is requested). The matter has not been referred to any Court, because nobody has any incentive to challenge the ruling given by the officials.

It is, however, a part of our function to say that this ruling was bound to lead to anomalies in competition between firms distributing their own bread, and others which distributed bread bought from an independent bakery. Moreover, the scale of the problem has been vastly increased by the change in the Standard Industrial Classification, whereby the pasteurizing of milk has been removed from distribution and reclassified as manufacturing: under the old arrangement, the treatment of milk roundsmen as transport operators could only help to secure exemption where the distribution was done by the producer of the milk (i.e. the farmer), whereas now it is relevant in the important cases in which the pasteurizer of the milk runs his own distribution system.

It should be added that the anomaly is not confined to the fact that some firms selling milk obtain refunds of SET, whilst others supplying milk to the same street do not: a retailer of groceries complained to us that in some areas they were facing competition from milk distributors who sold grocery products, both from the milk delivery van, and from the place on which it was based.

This whole matter is inevitably complex: we have not attempted to describe all the illogicalities which arise (e.g. when one cooperative society's bakery supplies bread in bulk to another's distribution depot). However, the basic principle of minimizing anomalies between different ways of performing the same function (and so allowing the more efficient system to prevail) seems to point to a change in the original ruling, if the administrative and legal matters can be arranged in that way; and this is supported by the general principle of widening the tax base and lowering the rate of tax. To many people any suggestion for cancelling concessions on the distribution of bread and milk may seem repugnant, as these are the necessities of life, but 'exemption from taxation is equivalent to a subsidy', and there is a strong case for bringing any subsidies into the open. The adoption of an indirect method of giving a subsidy, through classifying roundsmen as transport operators, has served to give the same concession to soft drinks, where the arguments about 'the staff of life' are not so appealing.

An anomaly which was pointed out to us by many firms, and particularly by retailers dealing in electrical appliances, was the favourable position of the showrooms operated by Electricity and Gas Boards, which were exempt from SET until regulations were made to change the position in September 1969. As this anomaly has become a thing of the past, we do no more than record that it was the cause of a great deal of justifiable bitterness about the Government's failure to hold the reins fairly as between the Public Sector and private enterprise.

Electricity and Gas Boards still receive refunds for employees who repair appliances and electric fittings etc., but they have been directed to make notional allowances for SET when fixing prices for contracts. This is, of course, a matter which is more relevant to firms in the construction trades, and we shall be investigating it in our examination of that part of the field. Nevertheless, there is a fair amount of competition between the Boards and certain firms in the distributive trades, and we should record the fact that we received complaints to the effect that there was no way of checking whether or not the Board did in fact make such allowances, or whether it simply offset them by making optimistic estimates about (for example) the amount of labour required, and relying on the notional allowance to serve as a contingency allowance. It was considered that the position would remain unsatisfactory unless the Boards published audited accounts for these activities, and these showed a super-profit equivalent to the SET which would have been paid.

It was also pointed out that the Boards have not been directed to make notional allowances for SET on the repair of domestic appliances, which is a trade in which distributors compete.

Despite all this, however, and despite some other minor items, we should conclude by stating our impression that in the case of the distributive trades the anomalies arising out of the privileged position of the Public Sector are not now of much quantitative importance.

CHAPTER XVIII THE EFFECTS OF SET ON INDUSTRIAL WHOLESALERS

The industrial wholesale trades come under SIC headings 831 'Dealing in Coal, Oil, Builders' Materials and Grain and Agricultural Supplies' and 832 'Dealing in Industrial Materials and Machinery'. Total employment in these trades is approximately 300,000—about 10 per cent of the total employment in the distributive trades.

In our study of the industrial wholesale trades we concentrated on the special effects of SET, and SET anomalies on these trades. But we also analysed the data which we obtained in order to see whether or not it gave broad support to conclusions about the general effects of SET (on productivity etc.) based on our study of retailing and traditional wholesaling. This chapter starts, therefore, with a quick survey of the figures, but without any econometric analysis of what might have been expected in the absence of abnormal new factors; Chapter XIX deals with the important topic of anomalies.

THE COVERAGE OF OUR ENQUIRIES

As there are considerable variations in the business of firms in the different industrial wholesale trades, it was clear from the start of the enquiry that we should have to prepare a separate questionnaire for each trade, and that, in order to complete the enquiry within a reasonable time, it would be necessary to concentrate on some representative trades. In the event questionnaires were sent to firms in nine trades: scrap metal merchants, waste paper merchants, steel stockholders, engineering distributors and machine tool merchants, agricultural machinery and tractor dealers, agricultural merchants, builders' and plumbers' merchants, woollen merchants and office machinery and typewriter distributors. We sent the questionnaires to firms in the waste paper and scrap metal trades before the announcement in the 1969 Budget that processing activities of employers in these industries would be eligible for refund—which, so we gather, means that in practice most important establishments will qualify for all their employees. At the time of the announcement, we had received enough returns from scrap metal merchants; some questionnaires had been returned by waste paper merchants, but very few of them had supplied us with accounting data, and after the announcement we received little additional information. It has, therefore, not been possible to include information for waste paper merchants in the tables giving accounting data. Nevertheless we have made use of the information we received from the waste paper merchants and the more comprehensive data we received from scrap metal merchants. Information of this kind should be helpful for a study of other reclamation trades which are still subject to SET, and the results which we obtained are of use for studying the general effects of SET.

Our effective coverage of the trade of office machinery and typewriter distributors was very limited because of the poor response of firms in this trade. Many of these firms receive substantial refunds of SET for establishments mainly engaged in repair work and presumably for this reason they did not consider

it worth their while to complete our forms. In the end we decided that we had received so little information that we should exclude this trade from the Report.

For the purposes of analysing accounting data we therefore have seven separate industrial wholesale trades, and for discussing the effects of SET eight trades including waste paper.

The main trades which were not covered at all were the coal and timber trades. We should not expect there to be widespread and serious SET anomalies *between* firms which distribute coal, but there is an anomaly between firms which distribute coal and the other fuel trades. Refunds are obtained for the employees of Gas and Electricity Boards employed in distribution, and oil refining and processing companies also receive refunds for many of their employees employed in establishments engaged in transport and distribution. The difference in treatment depends on the degree of vertical integration. This anomaly was referred to in our discussions with a firm which distributes large quantities of coal and with the Cooperative Wholesale Society. However, we should not expect it to result in a substantial diversion of trade from coal to the other fuel industries.

We approached the National Sawmilling Association and the Timber Trade Federation with a view to our studying the timber trade, as we expected the effects of SET anomalies to be serious in this trade. These associations did not however show any enthusiasm for our making this study; in particular, they told us that they 'could not say that we have had a "significant" number of complaints about unfair competition from members who do not get refunds of SET'. In view of this we decided with relief that we were justified in concentrating our limited resources on other trades.

PRELIMINARY ANALYSIS OF THE EFFECTS OF SET

The industrial wholesale trades which we studied can be subdivided into two groups. The first group is made up of trades which distribute goods and the second group includes trades which collect and process waste materials—the waste paper and scrap metal trades. The effects of SET for firms in the first group of trades are very similar to those for traditional wholesalers which were described in the second part of Chapter X, but in the second a firm which wishes to increase its gross margin has to follow a rather different procedure. Thus most traditional wholesalers raise their gross margins by raising their selling price in relation to the price at which they buy. In both the waste paper and ferrous scrap trades, however, the selling prices are generally fixed externally, and so the only way in which individual merchants can attempt to increase their gross margins is to reduce the price which they offer for scrap at their yard. This may make it no longer worth-while for some potential suppliers of scrap to deliver it, or for the merchant to incur the costs of collection. If as a result the total quantity of scrap collected and processed declines, this may well result in greater imports of materials.

Before the 1969 Budget there was within these trades competition between firms which received refunds and others which did not. Some firms received refunds for employees engaged in collecting, sorting, and processing waste and scrap material where these activities were carried on at a manufacturing establishment.

We must make it plain that we have not found it possible in these trades to use an econometric approach for disentangling the effects of SET from other forces. We have therefore only been able to give impressionistic assessments of these effects, based on our interpretation of the changes shown in the historical record.

In addition there are some special statistical problems involved in dealing with accounting data for these trades. In several trades, firms do repair work for which percentage margins are very different from those obtained for distributing goods, and changes in the balance of trade may affect margins from one year to the next. In the scrap metal trade, some prices are subject to quite violent fluctuations which must have effects on margins. In several of the trades some firms obtained substantial refunds. (Several firms which completed our forms received sufficient refunds to completely offset their SET payments. Data for these firms was excluded from the historical record.) These statistical problems make the estimation of the effects of SET on margins, etc., for these trades particularly hazardous.

Finally, our data do not cover as comprehensive a range of activities of industrial wholesalers as of retailers and traditional wholesalers, and the size of our samples in each trade do not justify firm conclusions about that trade taken by itself. We are really between two stools: we do not claim to have covered 'industrial wholesaling' as an aggregate, nor yet to give firm results for individual trades. We have averaged our results in order to get a convenient summary, and it is that summary which is probably the most useful of our quantitative results: but it is no more than an over-simplified way of looking at the messages conveyed by a number of rather uncertain straws in the wind.

PRODUCTIVITY

This is the section in which the statistical limitations are most acute, but it is nevertheless best to look at it first.

The Historical Record

The main source of information about labour productivity was the information obtained by the Department from firms and shown in Table IX.4. This shows an average increase in productivity of 6.3 per cent between 1965-6 and 1967-8 for industrial wholesalers, compared with 6.0 per cent for traditional wholesalers. There was also a rather similar further improvement between 1967-8 and 1968-9, which brought the total increase over 1965-6 up to 11.6 per cent. The macro-economic data, shown in Table IX.5, which is subject to important statistical limitations, gives a somewhat smaller increase for industrial wholesaling in the aggregate—9 per cent between 1965-6 and 1968-9: we were relieved to find no obvious inconsistency in these figures, though the amount of mutual support which they give each other is clearly very limited.

For what they are worth, the productivity figures for individual trades show substantial increases between 1965-6 and 1967-8 in five out of seven trades. In the two odd trades, the performance of woollen merchants was similar to that of the textile/footwear trades among the traditional wholesalers—both showed a small fall in productivity between 1965-6 and 1967-8, but this was followed by a good rise in 1968-9. The other odd trade was steel stockholding, in which the results are very sensitive to the general state of trade: the slight decline

between 1965-6 and 1967-8 was followed by a very large rise in 1968-9, which put steel stockholding in first place amongst the industrial wholesalers on the three-year comparison.

Reasons for Changes

There is no clear reason to expect the increase in productivity in the industrial wholesale trades before the introduction of SET to have been very different from that for traditional wholesalers. The fact that the historical record is similar after 1965 suggests, therefore, in a broad way that the effects of SET (and other abnormal new factors) was similar to that for traditional wholesalers. In the case of traditional wholesalers, we estimated this at 5.4 per cent in 1967-8 and 5.8 per cent in 1968-9.

Finally, there is one interesting side-light on our results which can be obtained from the difference in performance of the firms when classified according to their answers to the question: 'did the introduction of SET in 1966 lead you to make a tighter assessment of your labour requirements?' Fifty industrial wholesalers who provided accounting data said that it had done so, and forty-six said it had not. Both the 'yes' and the 'no' answers were spread evenly over the trades. On average, the firms which answered 'yes' increased their productivity by 11.0 per cent between 1965-6 and 1967-8, whilst the average increase for the others was only 2.1 per cent.

With all allowance for the uncertainty of the figures, and for the inevitable vagueness of the classificatory question, it appears that firms which reported an attempt to offset SET by making economies in their labour requirements achieved substantially better results.¹

COSTS AND MARGINS

In this part of the field no adjustments for changes in prices or wages are needed, but the figures are nevertheless subject to the limitations discussed above (e.g. changing 'mix').

The Historical Record

Table XVIII.1 summarizes the information about the costs and margins of industrial wholesalers for 1965-6 and 1967-8, given in detail in Chapters VI, VII and VIII.

Gross Margins

Between 1965-6 and 1967-8 industrial wholesalers' gross margins increased by 2.12 per cent, compared with 2.70 per cent for traditional wholesalers and 2.64 per cent for large retailers (see Tables VI.1 and VI.3). This comparison suggests that industrial wholesalers had greater difficulty in passing on increases in costs by raising their gross margins, and indeed the separate figures for the trades make the comparison appear more pointed: four of the seven trades showed either a *fall* in gross margin or a negligible rise, and rather special factors applied in some of the exceptional cases (e.g. high prices for non-ferrous metals). However, the (admittedly incomplete) data which we have for 1968-9 show the gross margin for industrial wholesalers as rising more compared with 1967-8

¹ A similar exercise was attempted for traditional wholesalers, but was found to be of no real value, because only a very small proportion of firms had answered 'No' to the question.

than that for other groups, so that the picture is complicated: the industrial wholesalers are much affected by the general state of the economy.

TABLE XVIII.1 *Costs and Margins as a Percentage of Sales for Industrial Wholesalers*¹

	1965-6	1967-8	Change 1965-6 to 1967-8	Percentage change 1967-8 c.f. 1965-6
Gross Margin	18.39	18.78	0.39	2.12
Other Trading Income	0.18	0.19	0.01	5.56
Total Trading Income	18.57	18.97	0.40	2.15
Payroll (excluding SET)	8.04	8.36	0.32	3.98
SET	—	0.46	0.46	
Other Expenses	6.78	6.92	0.14	2.06
Total Expenses	14.82	15.74	0.92	6.21
Net Margin	3.75	3.23	-0.52	-13.87

¹ Unweighted averages for seven industrial wholesale trades.

Expenses and Net Profit

Industrial wholesalers showed a steeper rise in their payroll/sales ratio than traditional wholesalers, whether or not SET is included. On the other hand their rise for other expenditure in relation to sales was smaller—but of course still helped to depress the net profit percentage.

The reduction between 1965-6 and 1967-8 in net profits as a percentage of sales for industrial wholesalers was rather steeper than that for traditional wholesalers: 13.87 per cent compared to 12.32 per cent. The percentage fell by nearly 20 per cent in four trades: in only one trade did it rise, and in that trade the rise was slight. Data for only four trades are available for 1968-9 but these do not suggest a substantial recovery.

In terms of return on capital (Table VIII.8) the decline in industrial wholesalers' profits was larger. The reduction for our sample of firms and trades was as much as one fifth.

The historical record can perhaps be summarized by the statement that during the period 1965-6 to 1967-8 industrial wholesalers obtained little help in dealing with SET and other cost increases by increasing their gross margins, and, though they achieved a sharp increase in productivity during this period, nevertheless they suffered a significant decline in their net profits as a percentage of sales.

Reasons for the Changes

There were a number of factors putting pressure on industrial wholesalers' profits. The abandonment of RPM was such a factor for engineering distributors. It may also have had some effect on agricultural machinery and tractor dealers, and, in 1968-9, steel stockholders. 1965 was generally a good year for trade, better than 1966 or 1967, and this must affect the comparison of profitability for

some trades. The most general factor was however SET and a major part of the reduction in net profits as a percentage of sales must be attributed to this factor.

QUALITY OF SERVICE

We asked firms in trades which distribute products, as opposed to the reclamation trades, the same questions about changes in the services which they provided as we asked traditional wholesalers. The response to this question is shown in Table XVIII.2. The proportion of traders making changes (73 per cent) is very similar to that for traditional wholesalers (69 per cent): once again the changes represented a reduction in the service offered, particularly to customers buying in small quantities. Restricting credit was again by far the most common change in service reported.

It seems reasonable to believe that these changes were in part caused by SET, primarily because it produced a profits squeeze.

Reclamation Trades

We asked a number of questions about changes in the services provided by firms in the reclamation trades in order to see whether there had been any change in their policy on collecting or processing of scrap. The replies from firms in the scrap metal and waste paper trades indicated that there had been some reduction in collections and processing since the introduction of SET, which probably tended to raise imports.

Seven out of nineteen scrap metal merchants said they had made changes in the arrangements under which they collected scrap metal. Three firms collected less frequently, or insisted on capacity loads before collecting, and two firms insisted on greater segregation of metal by type by the businesses from which they collected scrap. Others ceased collection from beyond a certain distance or else did not collect certain types of less profitable or more bulky scrap metal. A reduction in the frequency of collections may in certain cases result in an increase in the efficiency of collection rather than scrap not being collected: scrap may pile up until a full load is available. However most scrap metal merchants who completed our forms knew of examples of scrap metal which was available but which had ceased to be collected. Four of the six waste paper merchants who did not receive refunds of SET and who completed our questionnaire also said they had reduced their collections since SET was introduced in 1966.

The crucial question is how significant was the effect of SET in reducing collections. We had no way of estimating this at all accurately from the statistics of total national trade in scrap material because changes in these statistics from year to year were influenced by demand as well as by supply,¹ or from the questionnaire data. But we would expect the effect to have been quite small—certainly less than 3 per cent of all scrap metal and paper collected.

From further replies to questions it appears that SET had little effect in reducing the extent of processing by scrap metal merchants but that it may have reduced the extent of processing of waste paper. The effect of a reduction in sorting and processing of waste paper would be to reduce the quantity of the higher grades of waste paper available to mills and increase the quantity of lower qualities. Again the reduction in the value of scrap material reprocessed was probably quite small.

¹ Devaluation was also an important factor affecting these trades.

TABLE XVIII.2

Changes in Services Provided by Industrial Wholesalers

(Number of returns showing the answer)

Trade	Since the first half of 1966 have you made any changes in services?		Average number of changes per firm	Specific Changes Reported					
	Yes	No		Less frequent deliveries	Stricter control of credit	Increased minimum order size	Increased charges for small orders	Other changes	
Steel Stockholders	4	5	1.3	0	3	0	2	0	
Engineering Distributors and Machine Tool Merchants	13	4	1.2	0	12	2	0	1	
Agricultural Machinery and Tractor Dealers	16	2	1.1	0	16	0	0	1	
Agricultural Merchants	15	4	2.0	8	15	0	5	2	
Builders' and Plumbers' Merchants	12	8	1.0	0	11	0	1	0	
Woollen Merchants	6	2	1.5	2	4	3	0	0	
Total	66	25	1.3	10	61	5	8	4	

Other Measures by Industrial Wholesalers to Reduce Costs

(Number of returns showing the answer)

Trade	Have measures been taken since the first half of 1966 to reduce costs substantially?		Average number of changes per firm	Increased mechanisation	Taken over other companies	Closed warehouses or other premises	Reduction in stocks (Volume and/or number of items)	Other changes to reduce costs
	Yes	No						
Scrap Metal Merchants	16	2	1.1	14	0	0	0	3
Waste Paper Merchants	Not asked							
Steel Stockholders	6	2	1.3	0	3	1	1	3
Engineering Distributors and Machine Tool Merchants	7	9	1.3	0	0	0	5	4
Agricultural Machinery and Tractor Dealers	11	7	1.1	0	3	0	8	1
Agricultural Merchants	13	6	1.1	0	0	8	0	6
Builders' and Plumbers' Merchants	12	7	1.1	1	1	3	7	1
Woollen Merchants	3	2	1.0	0	0	1	1	1
Total	68	35	1.1	15	7	13	22	19

Two thirds of the industrial wholesalers had made other changes in order to reduce their costs. The response by trades and the changes made are shown in Table XVIII.3: more than half the firms had made changes to reduce costs in every trade except engineering distributors and machine tool merchants. In these trades firms may have been particularly reluctant to make changes which would result in their providing a worse service to customers.

Industrial wholesalers were asked to list the changes which they had made, rather than ticking items as traditional wholesalers were asked to do; it is not therefore possible to compare the importance of different changes for the two groups of traders. For industrial wholesalers the main changes were reductions in stocks, the closing of warehouses, the take-over of other companies and, in the case of scrap metal merchants, more mechanisation. The effects of those changes would be similar to those for traditional wholesalers.

CHAPTER XIX ANOMALIES IN INDUSTRIAL WHOLESALING AND THEIR EFFECTS

Although the main function of industrial wholesalers is the distribution of goods, it is common for them also to carry on certain 'manufacturing' operations (e.g. preparation of barley for malting, preparation of animal feeding stuffs, timber-cutting, minor processing of steel, processing of waste materials), and in some trades there is also quite a lot of repair and servicing work. The extent of these operations varies not only between trades, but also between the various members of any one trade, and it is this latter feature which causes many of the problems in connection with SET. In brief, the dividing line between manufacturing, as defined for SET purposes, and wholesaling is blurred rather than clear-cut.

As this point is so important, it is useful to add that these operations have always been regarded as a part of the function of the industrial wholesalers, and that firms which perform them commonly call themselves 'merchants' and belong to trade associations representing distributive trades. It is difficult to see how a firm could be in the timber trade or act as a steel stockholder without doing some sawing, or cutting of metal, and unfortunately for the administrator there is a continuous gradation from firms which perform a minimum of such operations up to ones which might reasonably be regarded as manufacturers, rather than distributors.

The 'manufacturing' activities of industrial wholesalers are sometimes on a big enough scale to secure exemption for the whole enterprise, rather than applying only on a 'split establishment' basis, and refunds are much more widespread and important than in the rest of distribution. The firms which obtain refunds for all their employees naturally obtain them for employees engaged in distribution and are a source of serious anomalies. Even where the wholesaler has to operate the split establishment rule, he may receive refunds not only for employees engaged in manufacturing, but also for some engaged in distribution. Consequently it is common for certain wholesalers to obtain an advantage over other wholesalers for distribution.¹

Another reason why some industrial wholesalers obtain refunds is that they quite frequently operate in two trades, e.g. steel stockholding and the manufacture of components for machinery. Where both trades are carried on at one establishment, this may be treated as a manufacturing one, and refunds be obtained for employees engaged in wholesaling. An indication of the problems involved in classifying establishments to the industrial wholesale trades is provided by the extent of reclassification following the introduction of SET.² The reclassification

¹ Several wholesalers told us that the effects of these anomalies were accentuated in their case because the firms which received refunds also received premiums because they operated in development areas. This feature of the tax is, however, of only historical interest—but the Regional Employment Premium remains, and is much larger.

² The reclassifications occurred where a firm which was previously thought to be carrying on a wholesaling business at an establishment was found to be a manufacturer. The changes do not include cases where a wholesaler obtains refunds, either for all or for some of his employees at an establishment because he carries out some manufacturing operations associated with wholesaling, i.e. a steel stockholder who received some refunds for manufacturing operations would not have been reclassified. (Ministry of Labour Gazette, March 1968).

for industrial wholesalers dealing in coal etc. (SIC 831) resulted in a reduction in employees of 6.6 per cent and for industrial wholesalers dealing in other materials (SIC 832) of 11.2 per cent. These changes compare with reductions of 0.3 per cent for retailing and 2.6 per cent for wholesaling.

Thus in addition to the competition of manufacturers who receive refunds of SET for their employees engaged in distribution, some industrial wholesale trades are split down the middle, between firms which receive total or partial refunds and firms which do not.

Industrial wholesalers' customers, most of whom are users of products—farmers, builders, engineers and tailors etc.—are another possible source of anomalous competition for wholesalers' distribution activities. Most of these firms (apart from builders) receive refunds, or do not pay SET because they are self-employed. The introduction of SET could cause these customers to buy direct from manufacturers through a purchasing section of their own, and so cut out the industrial wholesalers.

DISTRIBUTION

We now consider in rather more detail the various forms of anomalous competition in the work of distribution.

Competition from Manufacturers

Firms in the trades in which this type of competition occurred were asked similar questions to those which we asked traditional wholesalers. The answers received (summarized in Table XIX.1) indicate that the competition of manufacturers exists in all the trades shown.

The answers for individual trades must in general be left to speak for themselves, but some comment is required about the position of engineering distributors and machine tool merchants. A special feature of the competition in these trades is the existence of manufacturer/distributors who distribute substantial quantities of products manufactured by other firms, in addition to goods which they themselves manufacture. Provided that a manufacturer/distributor's distribution establishment has more than half the staff mainly employed in handling his own manufactured goods, and less than half are engaged in office work and selling, the establishment will be eligible for refund.¹ These distributors have the same advantages as wholesalers for presenting a range of products from which buyers can select, and their competition is therefore particularly serious.

Steel stockholders are not included in Table XIX.1 as we did not ask them the relevant questions. There is some competition between steel manufacturers and steel stockholders, but the British Steel Corporation has adopted a policy of increasing the proportion of steel distributed through stockholders. We obtained the impression that stockholders were not generally concerned by the difference in the SET treatment of the steel manufacturers (including the private steel companies) and themselves.

¹ We checked with a number of manufacturer/distributors to see if they obtained refunds for their separate distribution establishments. Some did receive refunds whilst others did not.

TABLE XIX.1 *Industrial Wholesalers' Answers to Questions about the Existence of Competition Between Manufacturers and Themselves*¹

Trade	Is the competition of manufacturers (or producers) serious for any of the goods you sell?		Are manufacturers your <i>main</i> competitors for any of the goods you sell?			
	Yes	No	Nearly all the goods	More than 50 per cent	Less than 50 per cent	No ²
Engineering Distributors and Machine Tool Merchants	16	1	4	4	8	1
Builders' Merchants	10	10	2	0	5	13
Agricultural Machinery and Tractor Dealers	5	13	This question was not put to firms in these trades			
Agricultural Merchants	12	7				
Woollen Merchants ³ (for UK Business)	6	2				

¹ Questions about the competition of manufacturers were not applicable to waste paper and scrap metal merchants. The position of steel stockholders is referred to in the text.

² Firms which answered 'no' to the first question were not asked to complete the question asking whether manufacturers were their main competitors. These firms have been added to the firms which answered 'no' to the second question.

³ On average 42 per cent of the turnover of the woollen merchants who completed our forms was exported. In these markets, merchants face competition from UK manufacturers who receive refunds, exporters of cloth from other countries and local manufacturers.

Competition from Industrial Wholesalers who Receive Refunds

The importance of this factor has been described in general terms above and Table XIX.2 aims at throwing some light on its quantitative size. The table shows the proportion of the firms in our sample, including those which did not reply, which receive refunds, but the over-all average of about 30 per cent is only a broad guide. In some trades, including steel stockholding, we approached a disproportionately large number of the medium and big firms and, as a higher proportion of these receive refunds,¹ the table may exaggerate the proportion of firms having refunds. On the other hand some Trade Associations gave us the names of volunteer firms to approach, and, as firms which received full refunds of SET were unlikely to volunteer, this tended to make our sample understate the proportion of firms in the trade which receive full refunds. This applies particularly to agricultural merchants.

¹ Large firms are more likely to qualify for refunds because they are more likely to have manufacturing departments and these are more likely to be separately managed.

Many of the industrial wholesalers in our sample who received refunds got them for a divided establishment, but there were a number of firms which obtain refunds for all their employees. Among steel stockholders, agricultural merchants, and waste paper merchants (before their transfer to the refund category) there were indeed a significant number of firms which received refunds for all their employees.

Other Types of Anomaly

Other sources of anomalous competition for industrial wholesalers' distribution activities are their own customers, or potential customers, who receive refunds, and self-employed traders. In general we have not found much evidence of a tendency for customers to take the initiative to cut out the wholesaler, but there were exceptions: some hay and straw merchants, for example, said that they faced severe competition from farmers, and steel stockholders face some competition from structural engineers. Where transport costs are an important

TABLE XIX.2 *SET Refunds Obtained by Industrial Wholesalers*

Trade	Proportion of firms which replied and which received refunds ¹	Proportion of firms which did not reply which received refunds ^{1,2}
	per cent	per cent
Waste Paper Merchants	33	n.a.
Scrap Metal Merchants	10	n.a.
Steel Stockholders	44	80
Engineering Distributors and Machine Tool Merchants	15	33
Agricultural Machinery and Tractor Dealers	10	0
Agricultural Merchants	37	20
Builders' Merchants	23	14
Woollen Merchants	27	50 ³
Average (excluding Waste Paper and Scrap Metal Merchants)	26	33

n.a.=not available

¹ Including firms which receive refunds for all or some of their employees.

² Based on information obtained from the Department of Employment and Productivity.

³ One out of two firms.

element of costs, and this applies to some parts of the business of builders' merchants, agricultural merchants, and steel stockholders, this type of competition could be expected to increase as firms and other organizations which obtain refunds, such as local authorities, take advantage of their position. In both the agricultural trades there is also a significant amount of competition from self-employed traders.

Some waste paper merchants and scrap metal merchants competed with paper mills and steelworks which obtained refunds for employees engaged in the same sort of operations as those performed by the merchants.

REPAIR AND SERVICING ACTIVITIES

Repair and servicing activities are not a part of the business of six of the eight industrial wholesale trades we studied. For engineering distributors and machine tool merchants repair work, servicing and rebuilding is of some importance, and about 10 per cent of the employees of the firms which completed our forms were engaged in these activities, though the figure is much higher for some firms. The competition from rivals who escape SET is not however serious in this trade, partly because of the specialized knowledge which is generally required: seven out of eleven firms went so far as to say that they faced no competition at all for repair work.

Repair work is much more important for agricultural machinery and tractor dealers: an average of between 40 per cent and 50 per cent of the employees of our panel of firms were engaged in repair and servicing work. Dealers were asked what types of business which escape SET competed with them for repair and servicing work. Seventeen said farmers doing the work themselves, nineteen said self-employed mechanics, twelve said mechanics working in their spare time, thirteen said blacksmiths and other craftsmen, nine said manufacturers who carry out servicing work and one dealer mentioned Electricity Boards. Competition for repair work from rivals who have SET refunded, or who do not pay SET, is clearly widespread in this trade.

MANUFACTURING

The third group of activities for which industrial wholesalers could face anomalous competition is their manufacturing activities. As some wholesalers obtain refunds for 'manufacturing' operations this raised the possibility that some wholesalers perform similar manufacturing operations, but do not receive any refunds. This seemed most likely to occur in the case of agricultural merchants and steel stockholders.

We therefore put questions to our panel of firms in these trades, about the operations which they performed, to see how important were the manufacturing operations for which firms did not obtain refunds. Our conclusion was that in these trades most firms which had a substantial proportion of their labour force engaged in manufacturing operations (more than 10 per cent) obtained refunds: this leaves, however, the anomalous position that firms which do a small amount of (for example) seed processing may be unable to obtain refunds and find the operation unprofitable.

We made a less thorough study of the position of woollen merchants, but it did seem that in this trade there were some differences in the treatment of firms performing very similar operations—with one firm obtaining refunds, and others performing very similar operations not doing so, depending primarily

on whether these operations are carried out in connection with 'merchandising' or in connection with 'manufacturing activities'.

CHANGES IN WHOLESALERS' SHARE OF THE TRADE

As for traditional wholesalers it was very difficult to obtain a measure of the changes in the share of trade held by industrial wholesalers since the introduction of SET and in this case the information which we obtained from manufacturers was very limited. The main trades for which we obtained any quantitative information about the diversion of trade were:

(1) *Scrap Metal Merchants.* Firms were asked to estimate the amount of extra trade they would have gained in 1968, if they had not paid SET. The answers averaged to around 4 per cent of their sales. We should not expect these estimates to understate the loss of trade.

(2) *Engineering Distributors and Machine Tool Merchants.* Firms in these trades were asked a similar question to that which we asked scrap metal merchants. The average estimated loss of trade because of SET was $4\frac{1}{2}$ per cent.

(3) *Steel Stockholders.* The British Steel Corporation's statistics show that the overall percentage of trade in steel products handled by steel stockholders has increased since 1965. Also the sales performance of the three stockholders who received full refunds of SET, and who completed our forms, was very similar to that of the firms which did not receive refunds. We concluded that there had been little diversion of business in this trade.

(4) *Agricultural Machinery and Tractor Dealers.* In order to obtain an indication of the extent to which dealers had lost business to their privileged competitors for repair work, dealers were asked to estimate how much bigger their turnover for repairs would have been in 1968, if they had obtained refunds of SET. This was again a very difficult question for wholesalers to answer, but sixteen firms attempted it. The estimated loss of trade averaged to about 5 per cent of firms' turnover for repair and servicing work.

We also tried to find out about a different type of 'diversion' of trade—i.e. about shifts which distributors had made in the nature of the goods handled, in order to avoid competing with privileged rivals. We obtained some indication of a shift to handling imports, but it was doubtful whether SET had had much part in producing this.

THE EFFECTS OF THE ANOMALIES

The evidence which we have collected for industrial wholesalers is very limited and so our conclusions about the effects of the anomalies are very tentative. The conclusions are that in the short-term the diversion of trade to people outside the trade has been quite small, but there may have been more serious diversions between firms in the trade which receive differential SET treatment. Moreover the anomalies have increased the difficulties of industrial wholesalers for achieving an increase in gross margins to offset the rise in costs including SET, and have therefore reinforced the squeeze on profits.

There is an important distinction between the position of industrial and traditional wholesalers when the longer term effects of SET are considered. In some industrial wholesale trades any assumption that eventually wholesalers who receive no refunds will be able to pass on more of this cost is much weaker

because certain firms doing the same type of business obtain refunds for employees engaged in distribution. This applies to some steel stockholders, manufacturer-distributors of engineering products and machine tools, and agricultural merchants.

Apart from this, many industrial wholesalers who pay SET have no equivalent of the semi-protected small retailer market available to them from which their competitors often hold back.

POSSIBLE CHANGES TO SET RULES FOR INDUSTRIAL WHOLESALERS

As the position in industrial wholesaling is rather unsatisfactory so far as SET is concerned, this inevitably raises the question whether a better result could be secured by changing the SET rules in this part of the field.

We start with the question whether industrial wholesaling should be liable to SET at all. It is clearly necessary, in examining this question, to consider the *whole* business of the wholesalers, and not only their distributive function.

In approaching this question for wholesalers in general, on page 167, we said that one might reasonably put the onus of proof on the people who want to *include* wholesaling within the scope of SET, rather than on the people who want to *exclude* it. This seems even more plausible in relation to industrial wholesaling, and we therefore start by considering the arguments which might be advanced in favour of inclusion. These seem to fall under three headings:

- (a) There is the general argument that by widening the tax base one collects more revenue for a given tax-rate and so can have a lower rate than might otherwise be necessary. If all industrial wholesaling were transferred to the refund category, this might mean a loss of about £20 million a year in revenue, so that the amount at stake is far from negligible. However, we are basically concerned with the distribution of materials for industry, tools of trade, and so on: if one is considering purely the revenue aspect, therefore, one might well advance the counter-argument that the production of such things is normally exempt from selective indirect taxes, and that there is no particular reason for wanting to collect revenue by a tax falling on their distribution.¹
- (b) In so far as SET has contributed to an abnormal rise in productivity in industrial wholesaling, there is a case for retaining this activity within the SET field—although it seems to us unlikely that the improvements already achieved would be reversed.
- (c) The exemption of industrial wholesaling would undoubtedly create some anomalies around the new boundary of the SET field.

As against this, the main arguments in favour of exempting industrial wholesaling rest on the serious anomalies which exist now, and which might be eliminated: these involve both a shift of trade—including repair work etc.—to less efficient channels (which was small in 1968, but is likely to grow) and an immediate loss of profits to the wholesalers. These problems are worse than in traditional wholesaling because the present rules divide some types of industrial wholesaling down the middle; in this way they create acute competition between wholesalers who receive complete (or partial) exemption and those who do not.

There are, of course, also the subsidiary points which were listed on page 167 in the discussion on traditional wholesaling, but the major point arises out of the anomalies.

¹ See the footnote on page 14.

It seems, therefore, that the major issue is a comparison of the present anomalies with the ones which would emerge after the change, and for this comparison it becomes crucial to decide exactly what the change should be. A broad idea of industrial wholesaling is sufficient for establishing whether there is a *prima facie* case to be examined—to which I feel bound to say 'Yes', even at the risk of going outside my terms of reference. But for a comparison of anomalies the new definition has to become more precise: this process has indeed some chicken-and-egg characteristics since the details of the new rules should be framed partly with a view to minimising anomalies, as well as reflecting a tenable general philosophy.

So far as the general philosophy goes, two possibilities have some appeal:

- (a) One line would be to start from the idea of exempting the wholesale distribution of goods which are selected as being primarily industrial materials, tools of trade etc. used by firms in industries which are themselves exempt from SET—notably manufacturers, farmers, transport organisations.

The list of goods would not be comprehensive but would aim at fitting as well as possible with those handled by a self-contained group of traders. It would, for example, omit motor vehicles, which are handled by a quite separate trade, which is also involved with supplies to consumers; it would also probably omit most builders' materials, which not only go to a SET-paying trade, but which would also lead to anomalous competition between builders' merchants (exempt) and hardware shops (taxed).

- (b) The second approach would be to start with the present definitions of SIC 831 and 832, and to consider which trades within them (if any) should be omitted, and whether any wholesalers classified elsewhere should be specially included.

As we see below, these two approaches lead to much the same kind of suggestions.

One other crucial question has to be decided, which is whether to enforce the rule about the exemption of an establishment depending on not more than 50 per cent of its employees being engaged on non-qualifying activities. This matter was discussed in Chapter XVI in relation to wholesalers in general, and was found to raise a very awkward dilemma: if wholesalers have to comply with this general ruling, they are liable to be divided down the middle; if they are excused from it, the scope for 'abuse' (by introducing side-lines in activities which are taxed when they are performed by specialists) is enormous.

In the case of industrial wholesaling our limited researches suggest that most firms which conduct a normal range of operations will be able to pass the test, since the sales and office staff are likely to be outnumbered by the other types of workers, because these are commonly augmented by people engaged in subsidiary manufacturing and repair activities. There would of course be brass-platers who would still be liable, but the objection about divisions within the trade would be much less acute than in traditional wholesaling. What is much more important, however, is that (so far as our limited knowledge goes) the divisions within the trade would usually be less acute than they are now.

If, therefore, we were asked which type of assumption about non-qualifying activities made the strongest case for exemption, our impression is that the answer would be 'insist on the standard 50 per cent rule'.

The Possible Scope of the Exemption

On the question of the trades to be covered, the first principle suggested above would lead most naturally to a collection of goods which constitute the stock-in-trade of virtually all the trades classified under SIC 831 and 832, with the exception of the builders' merchants, and possibly the coal and oil merchants: the last-named is awkward, because it would be very difficult to split the trade between sellers of industrial coal and other coal, and the decision would probably have to turn on whether the Government did or did not wish to tax the distribution of coal (whilst assisting in various ways with its production).

A case might also be made for adding the distribution of cloth (for which the export argument is quite important, as well as the general one of exempting materials for further production) but this would involve anomalies *vis-à-vis* general wholesale textile houses.

The Arguments to be Considered

The above discussion has been aimed at defining, very tentatively, the sort of proposition which might be considered—and which would certainly require further investigation of detailed points. It leads broadly to the suggestion that the best case would be for the transfer to the refund category of the trades classified in SIC 831 and 832, excluding builders' merchants (831·2) and possibly coal and oil merchants (831·1); and for the maintenance of the standard rule about non-qualifying activities.

What, then, are the considerations which should be examined in making a decision?

To recapitulate, there is first the argument about loss of revenue *versus* the undesirability of taxing industrial materials etc., mentioned above: this clearly brings in considerations of exporters' costs as a special issue—but the amount at stake will generally be very small.

There is next the desirability of maintaining the stimulus to productivity *versus* the risk of diverting trade into less efficient lines to avoid SET, *plus* the inequity of lowering the profits of certain industrial wholesalers by imposing a tax on them and not on their rivals.

And thirdly, there is the comparison between the anomalies which we have now and the anomalies which would exist under the proposed alternative—which is what we must now examine.

The main *gain* from the change would be the elimination of the anomalous competition between a taxed wholesaler and a firm which is untaxed—whether a manufacturer, a wholesaler with complete or partial exemption, a user, a self-employed repairer or what not.

The potential *drawbacks* seem to be the following:

- (a) There will be some new anomalies within the trade, because of the '50 per cent non-qualifying' rule—but in general these should be less than the present ones.
- (b) Exempt industrial wholesalers may sell some commodities normally handled by other traders, and so have an anomalous advantage. There is bound to be some of this, but at present the industrial wholesalers—apart from the builders' merchants, who would not be exempted—seem to keep to fairly distinct commodities: the main danger is that they might build up side-lines in other goods—but in the main they supply rather distinct markets, so that they would have few connections from which to develop.

Anything which could be done to prevent the deliberate use of the exemption to create such anomalies would of course be welcome—e.g. a specially tight definition of the trade, to keep 'outside' sales well below the traditional 50 per cent.

- (c) Other dealers which sell some industrial materials etc. may suffer unfairly if their main competitors are exempted.

One negative point is worth making, especially as our use of the term industrial *wholesalers* may have caused confusion. In actual fact, both SIC 831 and SIC 832 cover all *dealers* in the various goods, so that there is no question of creating an anomaly between the retail department at a predominantly wholesale establishment (exempt) and a true retailer (taxed). In this respect the position is quite different from that in traditional wholesaling.

It is our impression that the new anomalies would be less formidable than the present ones—but of course any change always creates problems and hard feelings, and pressure for further extensions.

Selective Exemption?

If the decision is adverse to a general exemption for industrial wholesaling of the above type, there is clearly a case for considering the exemption of further 'reclamation trades', which are concerned with the recovery of waste materials for re-use, rather than the distribution of new goods.

On this we can offer nothing but general observations, since processing activities of employers in the two trades which we selected for examination—waste paper and scrap metal—have already been put in the refund category.

Quite simply, we can think of no good reason for imposing a tax on firms which add to the supply of (say) rubber in the country by reclaiming waste rubber whilst exempting the production of synthetic rubber and importing large quantities of rubber from abroad. We do not accept the argument that such firms should automatically be made to bear the tax because they are in a service industry, and in our ignorance we imagine that the problems of definition must be manageable.

Repairs

If industrial wholesalers are exempted as such, the problem of their repair activities will virtually disappear (since few firms doing this work are likely to have trouble with the 50 per cent non-qualifying rule). If, however, the decision goes against such an exemption, the question remains of possibly changing the rules about obtaining exemption for repair work under the split establishment rule. A little back history may help to pose this question.

Initially all repair and servicing was treated as 'services', unless it was specifically allocated to a manufacturing heading in the Standard Industrial Classification. As a result of Tribunal decisions however some types of repair work and most notably repairs to office machinery were transferred to manufacturing and, apart from cases specifically allocated to one side or the other in the SIC, the policy of the authorities now seems to be to classify as 'manufacturing' repairs to those kinds of goods where the bulk of the repairs is carried out by establishments classified as manufacturing. If the bulk of repairs are carried out at establishments whose main business, apart from repairs, is distribution, then specialist repair establishments are classified to distribution.

As a result of this policy, the DEP has allowed repairs of industrial machinery into the refund category, and it would allow repairs that involved the manufacture of parts into the refund category. But it would resist applications for refunds for repair work by agricultural machinery and tractor dealers, and the employees of garages and shoe repairers do not qualify for refund because these businesses are specifically allocated to the 'services' sector.

A logically more satisfactory basis for distinguishing repairs would be on the basis of 'fiscal balance'. Where the manufacture, or production of a product is subject to indirect taxes—e.g. cars and shoes (which are liable to purchase tax) and buildings (where there is a SET charge)—then there is a case for making repair work subject to SET on grounds of fiscal balance. If the manufacture of the product is not subject to indirect taxes—e.g. machine tools and agricultural machinery—then there is a case for giving refunds to repair establishments. A possible disadvantage for such a change, apart from the loss of revenue is that it may result in new anomalies—e.g. one establishment may repair both tractors and cars—but not many such examples spring readily to mind.

THE RATE OF TAX

It is perhaps right to conclude this chapter with a point which is really obvious, but easily forgotten: the importance of anomalies in tax regulations grows rapidly with the rate of tax, when rival suppliers are differently treated.

This truism needs to be reinforced with an explanation of its relevance to the material which we have presented. The accounting statistics used in this Report—especially for industrial wholesalers—frequently end with a year in which the rate of tax was only 25s. a week: in no single case do they include a full year with the tax at 37s. 6d., or a year in which the 48s. rate applied even for a day. Some of the other information reflected the position in the early months of 1969, but even so related in part to (for example) the loss of trade in 1968: the 48s. rate had virtually no influence on the information which we collected about anomalies, except as a future event which we discussed at interviews. Our material is bound, therefore, to understate the case for considering whether anomalies can be reduced.

CHAPTER XX MAIN FINDINGS AND GUIDE TO THE REPORT

This chapter is in no sense a summary of the Report, much of which does not lend itself to such treatment. It states the principal findings of a statistical kind, adding enough exposition of the problems involved to explain their broad meaning. Apart from that, it gives a brief guide to the structure of the Report, which may help readers to find where the problems in which they are interested are discussed, and how they fit with the rest of the analysis; and on occasions it indicates briefly some of the conclusions.

LOGICAL NATURE OF THE ENQUIRY

First, it is essential to be clear that the enquiry is concerned with the effects of having a selective employment tax as an *alternative* to having additional taxation of some other kind, which would have a broadly equal effect on the balance between overall demand in the economy and potential supply. When SET was introduced in 1966 it constituted a net addition to taxation, rather than a replacement of some other tax, but the Report is *not* concerned with this side of the matter. (See pages 3 and 21.)

Secondly, the Report tries to assess these effects by comparing what *has* happened with what *would have happened* under an alternative tax. The straight comparison between 'before SET' and 'after SET'—which we call 'the historical record'—can tell us little or nothing about 'the effects of SET': these can only be assessed by comparing 'what actually happened' with what would otherwise have been 'expected' under similar general conditions, on the basis of an econometric analysis of pre-SET statistics.

Thirdly, one must be clear what the econometric analysis can and cannot do in saying what would otherwise have been expected. Broadly speaking, it can allow for the basic trend in the item under investigation and for all factors which affect the distributive trades through the *level of demand* or through the *general state of the labour market*—which means that allowance has been made for the effects of the general squeeze on internal demand in the various years; naturally, one cannot expect any statistical analysis to do this perfectly but some guidance is available about its accuracy, and is given in the text.

On the other hand the econometric analysis does *not* allow for such factors as the ending of resale price maintenance, which affect distribution by altering the nature of the competitive process. Our statistical results must, therefore, be regarded as measuring the combined effects of SET and other 'abnormal new factors' of this kind—of which the really important one is the progressive ending of resale price maintenance on more and more goods.

PRODUCTIVITY, MARGINS AND EXPENSES

The assessment of the effects of abnormal new factors on productivity are given in Chapter XI (retailing) and chapter XII (wholesaling). Particular attention is drawn to the discussion of reliability in the last part of each chapter, which leads to the conclusion that the figures can be used with fair confidence for

broad purposes, but that assessments of fine differences (e.g. between the gain in productivity in wholesaling for 1967 and 1968) are subject to a large proportionate error.

Table XX.1 shows the *actual* level of productivity in each year, taking 1965 as 100, in contrast with the level which would have been *expected*, on the basis of pre-SET experience: there are various ways in which this 'expected' figure can be assessed (see the concluding part of Chapter XI), but, to take an example, we think it unlikely that any reputable method would have altered the 1968 figure by much more than 1½ units. The final column shows the percentage gain in productivity above the level which was expected.

TABLE XX.1 *Gain in Productivity as a Result of Abnormal
New Factors*
(Index Numbers, 1965=100)

	Actual productivity	'Expected' productivity (on pre-SET experience)	Difference as a percentage of 'Expected' productivity
<i>Retailers</i>			
1966	102.5	100.8	1.7
1967	106.0	102.6	3.3
1968	111.1	105.6	5.1
<i>Non-Industrial Wholesalers</i>			
1966	103.1	101.0	2.0
1967	105.9	100.5	5.4
1968	110.2	104.2	5.8

The gain in productivity may also be expressed by saying that without it the distributive trades would have required more labour than they in fact had: the difference (in terms of full-time-equivalent persons) comes out for 1968 at rather over 100,000 in retailing and 30,000 in wholesaling. It is not possible to say what types of people would have been recruited or retained to produce this difference, or what they were doing in 1968.

Payroll Costs

The saving of labour through higher productivity has helped to keep down the cost of payroll as a percentage of sales; on the other hand the payment of SET has of course raised payroll costs. Table XX.2 shows the *actual* movement of payroll costs, as derived from our samples of traders, and the figures for these two elements.

It will be seen that the saving in payroll costs through higher productivity went a long way towards off-setting the cost of SET.

Margins

Table XX.3 shows the movements in gross margins and in net margins which we derived from our combined sample of retailers, together with the movements which were 'expected' on the basis of the econometric analysis, and hence the 'effects' of the abnormal new factors.

TABLE XX.2

Payroll Costs and SET
(All figures are percentages of sales)

	1965-6	1966-7	1967-8	1968-9
<i>Retailing</i>				
Actual payroll (excluding SET)	12.38	12.63	12.56	12.47
Additional payroll needed if productivity had been at 'expected' level	—	0.21	0.41	0.64
SET payment	—	0.33	0.72	0.83
Effects of abnormal new factors on payroll cost (including SET)	—	+0.12	+0.31	+0.19
<i>Wholesaling</i>				
Actual payroll (excluding SET)	5.51	5.58	5.57	5.58
Additional payroll needed if productivity had been at 'expected' level	—	0.11	0.30	0.32
SET payment	—	0.15	0.31	0.34
Effects of abnormal new factors on payroll cost (including SET)	—	+0.04	+0.01	+0.02

Note:

The retailing figures cover our returns from both 'large retailers' and 'smaller retailers'. The wholesale figures relate to those from 'traditional wholesalers' only.

TABLE XX.3 *Movements* in Retail Margins since 1965-6*
(Percentage Points)

	1966-7	1967-8	1968-9
<i>Gross Margins</i>			
Actual movement (to year shown)	0.28	0.66	(0.57)
Expected movement (to year shown)	0.41	0.42	1.25
Effects of abnormal new factors	-0.13	0.24	(-0.68)
<i>Net Margins</i>			
Actual movement (to year shown)	-0.47	-0.55	(-0.75)
Expected movement (to year shown)	0.07	-0.25	0.22
Effects of abnormal new factors	-0.54	-0.30	(-0.97)

* All figures represent the difference between the percentage margin in the year shown and the percentage in 1965-6, when the figures were: gross margin 25.86 per cent, net margin 6.51 per cent. Net margins are calculated before any allowance for rent or interest.

The 'actual' figures for 1968-9 are based on a smaller number of returns, linked through 1967-8.

The reliability of these figures is discussed in Chapter XIII, and (very briefly) in the next section.

A similar analysis was attempted for wholesalers, but we could not find sufficient data about pre-SET experience for a proper econometric analysis. The data and analysis presented in Chapter XIII give some support to the idea that one should use an adjusted version of the factors which were used for retailing, but it does not seem right to do more in this summary than say that the abnormal new factors have reduced net margins. (See Table XIII.7.)

Overall View

The above results are of course subject to considerable statistical uncertainty, and have been prepared by quite independent methods, so that there was a real danger that they might be seriously inconsistent—i.e. that the effect on gross margins would not be equal to the sum of the effects on costs and on net margins. The tests of this point in Chapter XIII were, however, quite surprisingly reassuring—though they cannot, of course, eliminate the danger of there being a serious error in (say) gross margin, which is balanced by a serious error in the same direction in net margin.

Having regard to the dangers of statistical errors, we consider it best to draw on all our statistical results for both 1967–8 and 1968–9, and make a broad statement of our conclusions for retailing and traditional wholesaling together: this might be regarded as applicable to the second year of SET (ending in September 1968), when the rate of tax was 25s. per week for a man. It is as follows:

- (a) Gross margins were higher than before the introduction of SET, but the average rise was if anything rather smaller than one would have expected on the basis of past experience.

To put this another way, in conditions of progressive ending of RPM, the distributors *as a whole* did not make any recovery from the consumers to set against the cost of SET, and indeed probably received *less* in the way of gross margins than was to be expected on past experience.

This outcome was the result of different experiences in different trades, some of which received a considerably smaller gross margin than would have been expected in the absence of abnormal new factors—presumably because the ending of RPM had a large effect on them.

- (b) The volume of sales per person engaged in distribution (reckoned in terms of full-time-equivalents) showed a considerably greater rise compared with 1965–6 than past experience would have led us to expect. This abnormal increase in productivity led to a saving on payroll costs which, in the trade as a whole, went a long way towards covering the cost of SET.
- (c) The distributors earned a net profit (before rent, interest or taxation) which represented a decidedly lower percentage of sales than prevailed before the introduction of SET. Allowing for the movement which one would have expected in view of the conjunctural factors, the combined effect of SET and the RPM changes was to lower profits (on average) by the equivalent of more than half the cost of SET.

A rather more formal statement of these conclusions is to be found in the final section of Chapter XIII.

OTHER STATISTICAL FINDINGS

The above findings are in rather cold statistical terms. Chapters XIV and XV set out our findings about the effects of abnormal new factors on such matters as the quality of service, methods of working, the composition of the labour force and the number of shops (or rather their 'selling capacity').

The main finding was, in a sense, that these effects had been unsensational, but that they might nevertheless be of some importance, particularly in the

longer run. The impact of SET and/or RPM seems to have been largely to *accelerate* the taking of action which would have been worthwhile anyhow—e.g. introduction of more self-service or more self-selection.

Understandably enough, there has been a move away from the employment of part-timers working for twenty-one to thirty hours a week, which involves the payment of the full amount for SET. There seems also to have been some slight shift towards female labour.

The investigation of the effects on the selling capacity of the retail industry was greatly handicapped by the fact that certain official statistics were not available beyond March 1967, so that the conclusions (given at the end of Chapter XIV) are very tentative.

ANOMALIES IN SET

The Report considers, in Chapter II, various general arguments about the allegedly anomalous nature of SET: most of these are regarded as mis-understandings of the functions of the tax—which has also suffered greatly in public esteem through the almost universal mis-understanding of its objective (see pages 5 and 21).

The anomalies which the Report seeks to examine are essentially those in which one competitor pays the tax and another does not. These arise most acutely in wholesaling, and the issues are discussed at some length in Chapter XVI (for traditional wholesalers) and Chapter XIX (for industrial wholesalers). The main cause of the anomalies is competition between a taxed wholesaler and a manufacturer selling direct, since the latter usually escapes SET even in his distributive establishments: there are also, however, important anomalies—particularly in industrial wholesaling—where some wholesalers secure complete or partial refunds and others do not.

The discussion includes a review of the various ways in which the anomalies might be mitigated, either by extending the scope of SET to establishments which now escape or by widening the scope for refunds. In each case consideration is given to the creation of new anomalies around the revised border-line.

Other types of anomaly are discussed in Chapter XVII, notably those arising out of the exemption of self-employed workers, the method of assessing SET and competition with the Public Sector.

THE HISTORICAL RECORD

Although the effects of SET, or any other factor, can only be assessed by a comparison between what actually happened and an 'expected' position, nevertheless the historical record is of considerable interest in itself. The information which we assembled on this is given systematically in Chapters VI to IX: it is in much greater detail than could be used for the subsequent analysis, and gives (for example) separate figures for individual trades.

This is preceded by Chapter V, which shows the size of SET in relation to a wide variety of yardsticks: without this it is very easy to have a quite false idea of the size of the thing under discussion.

APPENDIX A.

AN EARLIER ANALYSIS OF THE MAIN ISSUES

This appendix reproduces the final section of the London and Cambridge Economic Bulletin for June 1966, which was headed 'Selective Employment Tax' and was written by the present author. The article as a whole gave an analysis of the economic position of the country, and the first sentence (which is of great importance for the present purpose) has to be read as the link with the general analysis which preceded it.

For a review of the prospects of the British economy to mid-1967, the above figures are the crucial ones, and the importance of the decision to introduce SET lies more in the fact that it constituted a net addition to taxation than in the special features of this new fiscal instrument. Nevertheless, from the longer-run point of view it is important to consider the consequences of such a tax and its associated out-payments; and even in the short run the *form* of the new taxation imposed is of some significance, as well as the amount of revenue yielded—though it is vital to maintain a sense of proportion about the likely quantitative size of its many influences.

The first point to note is that many features of SET were clearly dictated by administrative considerations, rather than reflecting a view of what was ideally desirable. This probably applies, for example, to the use of flat-rate payments and refunds, rather than a percentage of the payroll, which in many ways would have been economically more desirable; and it certainly explains such anomalies as the taxation of all charities which have insurable employees. Some of these 'administrative' points are quantitatively very important, and are discussed below; but it seems best to start by looking at the *principles* of the tax—what it is *intended* to achieve—before considering how far administrative considerations have caused deviations from these objectives.

Fiscal Balance

Secondly, there is the straightforward 'fiscal balance' point, the strength of which was exaggerated by the Chancellor, but which is nevertheless broadly valid. Thus, even if one eliminates the three items of consumers' expenditure which bear really heavy taxes for special reasons—tobacco, alcoholic beverages and petrol—it is still true that consumers' expenditure on goods is, on the whole, much more severely taxed than their expenditure on services, and that economic theory would certainly support greater equality of treatment.

To secure such greater equality, it would be more 'natural' to introduce a tax on the purchase of services as such, rather than on the labour employed on producing them (for example, a 3 per cent tax on the *takings* of the laundries, rather than the equivalent of a 6 per cent tax on their wage bill). The tax on employment is, however, not a bad substitute, and clearly solves numerous problems both of definition and of enforcement.

This appeal to 'fiscal balance' does not really justify a tax on services such as accountancy, which are essentially supplied to businesses of all kinds—including those which make heavily taxed goods. It is at its strongest in relation to services which the consumer buys *separately*, such as entertainment. The important case of distribution is in an intermediate category, since here the service is necessarily bought with the goods, and need not logically be subject to a separate tax: thus there is no more 'need' to have a separate tax on the service of distributing cigarettes than there is to have one on their manufacture, when there is a

heavy tax on raw tobacco which is an essential pre requisite for all later processes. (There is, however, little or no *objection* on grounds of fiscal balance to a moderate tax on distribution.)

The 'fiscal balance' argument needs careful consideration in relation to a tax on construction. It can perhaps be used to justify a tax on the items which affect the amount which consumers have to pay for housing—whether these be current items (decoration and repairs) or capital expenditure on new houses; in any case, Government actions in the field of housing have had so many different impacts on what the consumer has to pay (through subsidies, rent control, elimination of schedule A tax, cheap loans, differential rents and rates, etc.) that considerations of fiscal balance are almost impossible to apply. There seems, however, to be no good argument on this score for taxing industrial and commercial building, not to mention all types of building and civil engineering for public authorities.

Employment as Tax Base

Thirdly, we need to consider the special effects of imposing the tax on employment in the service industries, rather than on the sale of the services as such. Implicitly, the previous discussion has been assuming that, in the main, the tax will be passed on to the buyer of the service in the form of higher prices, and this is indeed the natural first approximation. Three special points do, however, need consideration:

- (a) A tax on labour as such gives a special incentive to economize in its use, and in the service industries this may well lead either to a reduction in the quality of the service, rather than a rise in its price, or to an increased use of machinery. The fact that SET does not apply to manufacturing, and so does not raise the price of machinery, means that this last effect is different from the effect of wages rising throughout the economy.
- (b) In the case of distribution, the fact that SET does not raise the price of the goods to be distributed means that conventional mark-ups will not (as with general price increases) yield increased revenue per article sold out of which to pay the increased cost of labour. The incentive to economize labour, even at the expense of quality of service, is accentuated by this, and the same is true in any other case where the price charged by the firm for its service is 'sticky' (e.g. stockbrokers' commissions).
- (c) The very fact of a selective tax being imposed on employment in this way may give a jolt to employers' ideas about the methods to be followed, and also help them to persuade workers to accept labour-saving systems of working.

Admittedly, these forces making for greater efficiency (at least in the statistical sense) seem likely to do little more than accelerate somewhat trends which already exist as a result of the ordinary workings of a competitive market. Their quantitative importance comes mainly from the size of the field to which they apply, rather than their own strength.

International Trade

The net subsidy to manufacturers of 7s. 6d. a week a man is clearly intended as a means of lowering the prices at which British manufactures can be sold, not to benefit the home consumer, but rather to enable the British manufacturer to compete more effectively with his foreign rival in both home and export

markets. When allowance is made for the cost raising effect of the tax on services used by manufacturers, the gain in competitive power is clearly minute in quantitative terms, but some importance may be attached to the initiation of a system which could be increased in power in future years.

The tax on various services sold to foreigners (including hotel services) is an undesired by-product of the scheme; in quantitative terms it is doubtful whether much foreign exchange (if any) will be lost by making visits to Britain somewhat more expensive, but with some financial services, for example, the competitive position may be more sensitive.

Administrative Problems

Space permits no more than a brief mention of two classes of problem, which are important in terms of economic efficiency, as well as on equity grounds.

First, the definition of the people in respect of whom the tax is to be paid, and its flat-rate nature, can produce quantitatively important results. With sufficient administrative ingenuity, these results might indeed be beneficial, if they gave a stimulus to the engagement of married women, pensioners, and others who might otherwise not find suitable employment; on the present proposals, however, there seems to be a real risk of adverse consequences. A point of particular importance here is the decision to exempt self-employed people: this may have beneficial effects in swelling the labour force, but it produces a serious risk of distortion (as well as sheer evasion). To take the retail trade as an example, it gives a powerful incentive to the adoption or retention of business forms which use self-employed workers—whether these be family shops or mail-order houses ‘employing’ independent agents. In many cases, modern labour-saving methods will be handicapped relatively to less efficient methods, because the latter use no employees at all.

The second—and in the long run perhaps the most intractable—set of problems arises from the definition of the ‘establishment’ which determines whether refunds and premiums are to be made. This concept is by no means an unambiguous one, but even apart from ambiguities there will be a powerful and cumulative tendency for manufacturing establishments to add to themselves departments for doing services—varying from building repairs to keeping the company share register—which will bring repayments and premia if done at a factory, but not if done by a specialist.

1. *Introduction*

This Appendix describes the methods adopted in the Department's own enquiries into the retail and wholesale trades, elaborating on the points made in the main text.

As explained in Chapter III, it was necessary to treat different sectors of the distributive trades separately. The method of approach adopted in each case is described briefly below:

Large Retailers. The approach to large retail firms was based on a postal questionnaire, which is reproduced in Annex 2. This was sent out in June, 1968. In May, 1969, a further form was sent requesting information for the financial year 1968. After the returns from these postal enquiries had been analysed, a selection of the firms were interviewed by members of the research team.

Smaller Retailers. The survey of smaller retailers was carried out in two parts: (i) an interview survey in four selected towns followed up by a postal questionnaire, and (ii) a purely postal survey in seven further towns. The questionnaire used in the postal survey is reproduced in Annex 2; that used in the interview survey resembled the large retailer questionnaire.

Wholesalers. The approach to wholesalers was very similar to that to large retailers. A postal questionnaire was sent to wholesalers and after the returns from these postal questionnaires had been analysed, a selection of firms were interviewed by members of the research team. The forms were sent to traditional wholesalers in October, 1968, and to wholesalers of perishable food in November, 1968. Separate forms had to be prepared for the industrial wholesale trades and these were sent out between December, 1968 and March, 1969. A further form was sent to the responding firms in May, 1969.

Mail-Order Trade. A questionnaire similar to that for large retailers was drawn up and sent to some fifteen mail order companies. However, despite repeated reminders this only produced two usable returns and we felt that this did not provide a sufficient basis to say anything about the effect of SET on this sector of the trade.

Retail Trade Associations. In August, 1968, a postal questionnaire (reproduced in Annex 2) was sent to retail trade associations.

Wholesale Trade Associations. In May, 1969, we wrote to wholesale trade associations, and asked them to provide information for the enquiry.

Manufacturers. A postal questionnaire (reproduced in Annex 2) was sent to manufacturers at the end of March, 1969. This covered their distribution activities, and specifically their sales to wholesalers and retailers.

The method adopted in preparing the questionnaires, selecting the sample and analysing the results is described below.

2. *The Questionnaires*

As explained in Chapter III, the aim of the DAE enquiries was to collect two different types of information: information of an 'accountancy' nature covering such things as profits, expenses and employment; and information of a more qualitative kind dealing with the policy of the firm and changes in this policy

since the introduction of SET. Since these two types of information would often be provided by different people within an organisation, we decided to prepare the questionnaire in two parts. The first (referred to below as the Tables) dealt with accountancy and other quantitative information; the second (referred to as the Questionnaire) with the qualitative information regarding policy.

In preparing the forms to be sent to firms, we recognised from the outset the difficulties that would arise in trying to obtain information covering all the questions that we should like to ask. These difficulties were particularly apparent in the case of the Tables. Many of the firms (especially the smaller ones) would simply not have the data we wanted, and even larger firms would not be able to supply it for more than the most recent years. Moreover, it was clear that firms would only be able to make returns in respect of their own financial years.

Recognition of the seriousness of these difficulties led us to decide at an early stage:

- (a) in the case of retailing, to limit the request for detailed quantitative information to the larger firms,
- (b) in the case of wholesaling, to limit our enquiry to a selection of trades,
- (c) to restrict the information requested in the Tables to the firm's most recent year before SET (broadly, '1965-6') and the following years.

On this basis we prepared a preliminary version of the Tables and Questionnaire reflecting our ideas as to what we would like to know and what we thought would be feasible. This draft version was then discussed with people knowledgeable about the trade in question and in particular with the relevant Trade Associations. These associations provided comments on the drafts, drew our attention to problems peculiar to their trade, and often arranged meetings to discuss the enquiry. In the case of the large retailer enquiry, which was the first to be prepared, we also discussed the forms at length with a number of individual firms who agreed to act as 'guinea pigs'. This assistance from Trade Associations and firms was extremely valuable to us and we are very grateful to all concerned.

The discussions with trade associations and pilot firms confirmed our belief that the problems of non-response would become impossibly large if we tried to impose very strict requirements for the information provided in the Tables. In many cases firms would not be able to provide a particular item on the precise basis that we should like, or would only be able to do so at the expense of a great deal of time. This problem appeared to be particularly important for the break-down of employment figures and of gross margins (by commodity groups), or in cases where the firm engaged in activities outside distribution and/or had acquired subsidiaries over the period covered. In view of this we decided:

- (i) to encourage firms to make a 'reasonable estimate' where an item was not readily available from their ordinary records, bearing in mind that consistency over the period was more important for our purposes than precise conformity to a standard definition. This was particularly stressed in the case of employment figures.
- (ii) to invite firms which engaged in activities outside the scope of the particular enquiry to provide information which they felt corresponded most closely to the field which we wanted to cover. The notes included guidance on some of the more straightforward problems, but we relied very heavily on the cooperation of the firms. In two of the most obvious

cases—retailers making sales on wholesale terms and retailers selling goods produced by their business—we requested information about the sales of these goods.

- (iii) to ask those firms which had acquired substantial subsidiaries to submit where possible separate returns for the original business and for each of the subsidiaries acquired.

Since the enquiries to different trades had to be launched at different times, the Questionnaire was designed to coincide with the position of the recipient when he would get the form. As a result the large retailer form sent in June, 1968 asked about *plans* for meeting the increase in SET in September, 1968, whereas the main wholesale questionnaire asked about *action taken*.

3. *Choice of Sample*

As explained in Chapter III, we accepted from the start that the problems of non-response were such as to preclude a truly scientific sample and that the results obtained could only be described as based on an 'indicative' sample. The method of selection adopted in each case is described below:

Large Retailers. In selecting the firms to receive the large retailer form, we aimed to include a high proportion of the very largest firms (all the 'household names') and a somewhat lower proportion of the medium-sized firms, paying particular attention to the need to secure adequate coverage of all the major trades. To this end the firms were drawn from lists prepared by Trade Associations and from trade directories.

Smaller Retailers. As described above, the smaller retailer enquiry was limited to a number of selected towns. The towns were chosen so as to give a good geographical spread and to cover a wide variety of conditions. Those selected for the interview survey were Birkenhead, High Wycombe, Salford and Wembley; those selected for the postal survey were Bedford, Cardiff, Colchester, Coventry, Dundee, Plymouth and Yarmouth. In each town the local Chamber of Commerce was approached and asked to assist us by providing lists of small retailers. They all agreed to do this and we are extremely grateful to them for their cooperation. In selecting the sample, we tried to omit firms largely staffed by self-employed persons. Consequently, our results cannot be said to cover the smallest retailers.

Wholesalers. As mentioned above, we decided from the outset to limit our enquiry to selected trades. In particular, we decided to exclude (a) brass plate wholesalers or wholesalers who were primarily engaged in importing, and (b) those trades where a very large proportion of firms receive refunds (e.g. petroleum distributors and timber merchants). In the case of industrial wholesalers we tried where possible to take at least one representative trade for various relevant groups (for example, we took scrap metal and waste paper firms as representatives of the reclamation trades, and woollen merchants as representing the textile trades)—although we recognised that not all differences would be covered.

In selecting firms within a particular trade, we chose firms from lists supplied by Trade Associations. In asking the associations for lists, we gave them the following guidance:

'We would like the list to cover firms which are mainly concerned with wholesaling, rather than manufacturing or retailing, and we would like it to cover firms operating the main types of wholesale business carried out by members of your association. Please include a good proportion of the larger and medium

size firms, but also some smaller firms. It would also be helpful if the list could include a good proportion of firms operating in the South East, as we can interview firms in that area at less cost in terms of time and expense'.

Trade Associations. The questionnaire to retail trade associations was sent to all associations known to use. The principal source was the list kept by the NEDC for the Distributive Trades and we are very grateful to them for their help. The questions for wholesale trade associations were sent to associations representing firms to which we had sent our questionnaire.

In each case the forms were sent to the selected firms together with a covering letter to a senior official of the firm and in most cases with a letter of support from the Trade Association or Chamber of Commerce concerned. The need for such a letter of support was brought home to us by our experience with the first enquiry that we undertook—the large retailer enquiry—and we are very grateful to these bodies for their support, which undoubtedly improved the response. A list of these Trade Associations and Chambers of Commerce is given in Annex I.

4. Response Rates

The response rates for the different enquiries are described below:

Large Retailers (see Table B.1)

A total of 317 forms were sent out and of these just under a half (141 or forty-five per cent) were returned. This response was disappointing, but as mentioned earlier, the forms were in this case mostly sent out without a letter of support from the Trade Association. The rate of response varied considerably from trade to trade—with over three-quarters of the co-ops returning the forms compared with only just over a quarter of firms in the food trade. In general the response was very much higher from the largest firms, and the high number of non-respondents in the food trade was in large part attributable to those at the lowest end of the size range. There were, however, a number of important household names that refused to cooperate in the enquiry e.g. Woolworths refused to be moved from their general rule of supplying no information (even in confidence) which they did not give to their shareholders.

In some cases non-response was attributable to the firm having ceased trading, or having been taken over by another respondent, and inevitably our lists included some firms not primarily engaged in retailing. However, the bulk of the non-response took the form of a definite refusal to take part. The reason most frequently given was the time or expense involved for the firm in completing the return and many of those refusing also indicated that they were reluctant to help the Government which had inflicted SET on them.

Of the 141 completed returns received, 121 were finally used in the analysis. The remaining twenty were in some cases transferred to the small retailer enquiry (because their sales were under £150,000 per annum) and in others excluded because the information provided was not adequate (for example the Tables did not cover all three financial years) or because they were primarily engaged in wholesaling or manufacturing.

Despite the relatively poor response, the returns provided a good coverage of the trade of large retail outlets. The total sales in 1966 of those responding was some £1,500 million. As a rough guide to the coverage, we have shown in Table B.2 the sales in relation to those by multiple retailers (defined as having

TABLE B.1

Response Rate for Large Retailer Enquiry

Trade	Forms returned		Reasons for non-response			Reasons for returns not being used			
	Forms sent (number)	Forms sent (number)	Percentage of those sent out	Refusal (number)	Other ¹ (number)	Forms used in enquiry (number)	Sales below £150,000 in 1962	Business primarily wholesale	Information provided inadequate
Department Stores	44	28	63.6	16	—	28	—	—	—
Cooperative Societies	21	16	76.2	5	—	16	—	—	—
Food	75	21	28.0	47	7	16	4	—	1
Confectioners/ Tobacconists/ Newsagents	20	8	40.0	11	1	8	—	—	—
Clothing and Footwear	55	24	43.6	28	3	20	3	—	1
Household Goods	72	32	44.4	37	3	21	3	5	4
Miscellaneous	30	12	40.0	18	—	12	1	—	—
Total	317	141	44.5	162	14	121	11	5	6

¹ Including firms gone out of business, those taken over by other respondents and those not primarily engaged in retailing.

² These returns were transferred to the 'smaller retailers' enquiry.

ten or more establishments), cooperatives and department stores as shown by the 1966 Census of Distribution. This suggests that the firms in our sample accounted for over a quarter of these sales. The coverage varies considerably from trade to trade—ranging from 7 per cent for co-ops to 70 per cent for confectioners etc. This reflects among other things the differing importance of large firms in different trades.

Smaller Retailers. In the case of the interview survey, the response from smaller retailers was very satisfactory: out of the 297 approached, we obtained 202 effective interviews. Of these 202, fifty-two also completed the financial table sent to them after the interview. The postal questionnaire was also sent to 375 firms in the second group of towns, and of these 155 (or forty-seven per cent) returned completed forms. This gave a combined total of 207 financial returns, of which forty-five had to be discarded for a number of reasons (primarily because the information provided was incomplete or because they had sales above £150,000).

TABLE B.2 *Sales of Firms in DAE Large Retailer Enquiry
Compared with Census 1966*

Trade	Sales £m.		(1) as a percentage of (2)
	(1) DAE Large Retailers, 1966	(2) Census of Distribution*	
Department Stores	141	544	26
Cooperative Societies	72	1013	7
Food	509	1648	31
Confectioners/Newsagents/ Tobacconists	104	148	70
Clothing and Footwear	358	858	42
Household Goods	55	374	15
Miscellaneous	190	673	28
Total	1429	5259	27

* Multiple retailers+department stores+cooperative societies

Wholesalers (see Table B.3)

The response of wholesalers was generally satisfactory: fifty-eight per cent of the traditional wholesalers to whom we sent questionnaires completed at least a part of the forms. Fifty-nine per cent of the industrial wholesalers cooperated. This response was particularly good when allowance is made for firms which received refunds and did not complete the forms. Such firms probably represent 30 per cent of the industrial wholesalers who did not reply.

The coverage in terms of turnover as a percentage of total turnover for all firms in the trade was much weaker than for retailers (see Table B.4). For traditional wholesalers the turnover of our sample was only 12½ per cent of the total. The explanation of this difference is that the wholesale trades are generally more fragmented than retailing—there are fewer very large firms.

The proportion of turnover of industrial wholesalers covered was not calculated because many firms in some of these trades obtain refunds.

TABLE B.3

Response Rate for Wholesalers

Trade	Forms sent out (number)	Forms Returned		Forms Used in Enquiry	
		Number	Percentage of those sent out	Accounting Data	Questionnaire only
Grocers	28	17	61	15	2
Frozen Foods	10	4	40	4	0
Confectionery	13	9	69	8	1
Tobacco	16	10	63	9	1
Footwear	15	8	53	7	1
Textiles	19	15	79	13	2
Millinery	9	5	56	5	0
Floorcovering	14	9	64	9	0
Electrical	27	18	67	17	1
Motor	11	5	45	5	0
Pottery and Glass	17	5	29	4	1
Hardware	14	8	57	7	1
Newspapers	18	13	72	13	0
Toys	8	5	63	4	1
Stationery	17	4	24	2	2
Pharmaceuticals	11	9	82	8	1
Total Traditional Wholesalers	247	144	58	130	14
Fruit and Potato	16	13	81	12	1
Poultry	11	10	91	9	1
Fresh Meat	37	6	16	0	6
Total Perishable Foods	64	29	45	21	8
Waste Paper Merchants	15	9	60	0	9
Scrap Metal Merchants	24	19	79	15	4
Steel Stockholders	27	12	44	7	5
Engineering Distributors and Machine Tool Merchants	32	17	53	15	2
Agricultural Machinery and Tractors	25	18	72	14	4
Agricultural Merchants	30	20	67	15	5
Builders' Merchants	47	20	43	18	2
Woollen Merchants	10	8	80	7	1
Total Industrial Wholesalers	210	123	59	91	32

TABLE B.4

*Trade covered by Wholesale Enquiry;
Traditional Wholesalers and Perishable Foods*

Trade	(1)	(2)	(2) as a
	Total sales of Trade in 1965	Total sales of sample firms in 1965	percentage of (1)
	£m.	£m.	%
Groceries and Provisions	1,279.6	104.1	8.1
Chocolate and Sugar Confectionery	51.6	16.8	32.6
Cigarettes and Tobacco	396.3	60.9	15.4
Boots and Shoes	48.2	4.7	9.8
Clothing and Textiles	404.1	53.9	13.3
Newspapers, Stationery and Books	143.6	92.3	64.3
Hardware and Electrical Goods	353.0	45.7	12.9
Chemists' Wares	136.5	14.2	10.4
Other Non-Food	583.3	33.0	5.7
Total Traditional Wholesalers	3,396.2 ¹	425.6	12.5
Total Perishable Goods	1,235.6	33.5	2.7
Grand Total	4,631.8 ¹	459.1	9.9

¹ Excluding: Beers, wines and spirits; Tea and Coffee; Paper and Paperboard; Petroleum products; General export merchants; Other general wholesale merchants.

Trade Associations. The questionnaire was sent to sixty-three retail associations in all and thirty-four completed returns were received. We wrote to thirty-three wholesale trade associations and thirty-two replied.

Manufacturers. The questionnaire was sent to some 320 manufacturing companies specialising in consumer goods. Around 25 per cent returned completed or partially completed forms. The degree of coverage differed between trades and was particularly low for textiles.

5. Analysis of Returns

On receipt the forms were checked for consistency and doubtful points cleared up by correspondence or telephone. We also calculated for each firm certain 'key' ratios—such as the gross margin, net profit as a percentage of sales, payroll as a percentage of sales—and these provided a check on the plausibility of the figures provided. Where there was large year to year variation in these ratios, we took this up with the respondent, and this provided both a useful check and some interesting information about particular changes. In all these respects we were given considerable help by the respondents and we are very grateful to them for the trouble that they took.

6. Type of Business and Definitions

The selection of the sample for the different parts of the enquiry has been described above. In analysing the returns, only those firms with annual sales in

excess of £150,000 were included in the large retailer enquiry. The smaller retailers covered those with sales below £150,000.

In the wholesale trades, the term 'traditional' wholesaler was applied to those that dealt in consumer goods.

The detailed definitions of the terms used in the enquiries will be found in the questionnaires reproduced at the end of this Appendix.

7. Classification by Trades

In the case of retailers and traditional wholesalers, we classified firms into a number of trades. These trades correspond closely to the principal categories in the Census of Distribution and the Inquiry into the Wholesale Trades. Those not self-explanatory are described below (only the main trades are included and no attempt is made to be exhaustive):

Retailing

Food:	grocers, dairymen, butchers, fishmongers, greengrocers and off-licences.
Clothing and Footwear:	men's and boys' wear, women's, girls' and infants' wear, drapery and clothing, boot and shoe shops.
Household:	furniture and furnishing shops, radio and electrical shops, ironmongers and hardware shops.
Miscellaneous:	variety and general stores, chemists, photographic dealers, jewellers, leather and sports goods shops, booksellers and stationers.

Wholesaling

Textiles and Footwear:	textiles, footwear, millinery and floorcoverings.
Electrical Goods and Hardware:	electrical goods, hardware, pottery and glass, motor factors.
Other Goods:	newspapers, toys, stationery and pharmacy.
Perishable Foods:	fruit and potatoes, meat and poultry.

8. Weighting of Individual Firms

In each case the information we needed was a ratio—usually a ratio of sales (e.g. gross margin or expenses/sales), but in some cases a ratio of net profits or employment. Having derived the ratio for each firm these were then combined to obtain an overall average.

(a) Weighting within a trade

In weighting the results within any one particular trade, we adopted the following procedure. Where the ratio was in terms of sales, we took an unweighted average of the ratios for individual firms. As explained in Chapter III, the justification for this procedure was the assumption that the sampling fraction was proportional to the size of the firm—which broadly reflected our basis for selecting the sample. This procedure was clearly preferable, for example, to one which assumed a uniform sampling fraction (since the results would then be dominated by one or two large firms).

Where the ratio was in terms of employment, we followed the same procedure and obtained the trade average as the unweighted average of individual firm ratios. The same justification can be applied as in the case of sales. It would clearly not, however, have been legitimate to adopt this method where the ratio was in terms of net profits. In this case, we worked indirectly using two ratios in which sales were the denominator.

(b) *Weighting between trades*

We recognised that our method of selecting firms (together with the uneven response from different trades) was unlikely to give the right weight to different trades. In view of this, we weighted the results according to the information provided by the Census of Distribution in 1966 and the 1965 Inquiry into the Wholesale Trades. In other words, the weights given to each trade were equal to the proportion of total sales (or where appropriate, employment) accounted for by that trade in the Census. The same procedure was adopted in combining the large and smaller retailer enquiries. In the case of large retailing, the Census weights were based on the sales of multiples plus sales by all department stores and co-ops; in the case of smaller retailers, the weights were based on sales by independents (apart from department stores) with an adjustment for the fact

TABLE B.5 *Weights used for Combining Trades*

Trade	Retailing ¹	
	Large Retailers	Smaller Retailers
Department Stores	10.34	
Cooperative Societies	19.27	
Food	31.35	44.41
Confectioners/Tobacconists/Newsagents	2.81	15.49
Clothing and Footwear	16.32	13.34
Household Goods	7.11	14.96
Miscellaneous	12.80	11.80
Sum of Weights	100.00	100.00
Trade	Traditional Wholesalers ²	
Groceries, Confectionery and Tobacco	61.42	
Textiles and Footwear	16.03	
Electrical Goods and Hardware	12.57	
Other Goods	9.98	
Sum of Weights	100.00	

¹ Weights are derived from sales as given in the 1966 Census of Distribution. For combining large and smaller retailers, the weights used were 69 and 31 respectively.

² Weights are derived from sales as given in the 1965 Inquiry into the Wholesale Trades.

that we did not cover firms at the very lowest end of the scale. (N.B. General Mail-Order Houses are excluded from the Census figures in all cases.)

Table B.5 shows the actual weights used to combine trades.

9. *End Date of Financial Year and 1968 Figures*

The majority of firms had financial years which ended in the period December-March. There were, however, a number whose years ended at other dates, and we had to adopt some rule for classifying firms. The rule adopted was to take the year 1965-6 as concerning those firms whose financial year ended between September 1st, 1965 and August 31st, 1966 for retailing and October 1st, 1965 and September 30th, 1966 for wholesaling.

Since not all responding firms were able to provide data for 1968-9, the figures available had to be linked to those for earlier years.

10. *Interviews*

When we had digested the results and preliminary tables had been compiled, we had interviews with senior officials of a number of the firms that had responded. The aim of these interviews was to explore in greater depth the information provided in the questionnaire and to obtain a better understanding of what had happened and why. In all some thirty of the large retailers, and fifty-two of the wholesale respondents, were interviewed. We are very grateful to the firms for making time available for these interviews.

ANNEX 1: LIST OF COOPERATING BODIES

We have listed below the Trade Associations and Chambers of Commerce that provided lists of their members as a basis for selecting our sample or completed the questionnaire to Trade Associations. We are extremely grateful to them and to all the other organisations (too numerous to list individually) that assisted us in the enquiry.

Chambers of Commerce

Bedford Chamber of Trade
Birkenhead Chamber of Commerce
Cardiff Chamber of Trade
Colchester and District Chamber of Trade and Commerce Limited
Coventry Chamber of Commerce
Dundee Chamber of Commerce
Great Yarmouth Chamber of Commerce
High Wycombe and District Chamber of Commerce
Manchester Chamber of Trade
Oban and District Shopkeepers Association
Plymouth Incorporated Chamber of Trade and Commerce
Twickenham Chamber of Commerce
Wembley Chamber of Commerce

Retail Trade Associations

British Watch and Clock Makers Guild
Cooperative Union
Drapers' Chamber of Trade
Federation of Merchant Tailors of Great Britain

London Fish and Poultry Retailers Association
 Menswear Association of Britain
 Multiple Shoe Retailers Association
 Multiple Wine Merchants Association
 National Association of Cycle Traders
 National Association of Goldsmiths
 National Association of Master Bakers, Confectioners and Caterers
 National Association of Multiple Grocers
 National Association of Retail Furnishers
 National Chamber of Trade
 National Federation of Fishmongers
 National Federation of Ironmongers
 National Federation of Meat Traders Association
 National Federation of Retail Newsagents, Booksellers and Stationers
 National Grocers Federation
 National Off-Licence Federation
 National Pharmaceutical Union
 National Shoe Retailers Council
 National Union of Retail Tobacconists
 National Union of Small Shopkeepers
 Retail Confectioners Association
 Retail Consortium
 Retail Distributors Association
 Scottish Federation of Fishmongers
 Scottish Grocers Federation
 Scottish House Furnishers Federation
 Scottish Licensed Trade Association
 Scottish Radio Retailers Association
 Scottish Retail Drapers Association
 Scottish Tobacco Trade Federation
 Wallpaper and Paint Retailers Association of Great Britain

Wholesale Trade Associations

Agricultural Machinery and Tractor Dealers Association Limited
 Association of Engineering Distributors
 Association of Toys and Fancy Goods Wholesalers
 Association of Wholesale Woollen Merchants
 British Association of Machine Tool Merchants
 British Scrap Federation
 British Secondary Metals Association
 British Stationery and Office Equipment Association
 British Waste Paper Association
 Electrical Wholesalers Federation
 Federation of Fresh Meat Wholesalers
 Federation of Hardware Factors
 Federation of London Wholesale Newspaper Distributors
 Federation of Wholesale Organisations
 Millinery Distributors Association
 Motor Factors Association
 National Association of Pharmaceutical Distributors
 National Association of Steel Stockholders

National Association of the Corn and Agricultural Merchants
 National Association of Wholesale Distributors of Frozen Foods
 National Committee of Canned Goods Importers, Brokers and Agents
 National Federation of Builders' and Plumbers' Merchants
 National Federation of Fruit and Potato Trade
 National Federation of Ships' Stores Merchants
 National Federation of Wholesale Grocers and Provision Merchants
 National Federation of Wholesale Poultry Merchants
 Office Machines and Equipment Federation
 Pottery and Glass Wholesalers Association
 Provincial Wholesale Newspaper Distributors Association
 Radio Wholesalers Federation
 Textile Distributors Association
 Wholesale Confectioners Alliance
 Wholesale Floorcovering Distributors Association
 Wholesale Footwear Distributors Association
 Wholesale Grocers Association of Scotland
 Wholesale Tobacco Trade Association

ANNEX 2. QUESTIONNAIRES USED

This annex reproduces 5 of the forms used in the Department's enquiries, with the notes sent to the firms; they are arranged as follows:

	Pages
(a) Form for large retailers	228 to 238
(b) Form used for postal enquiry to smaller retailers	239 to 240
(c) Form for traditional wholesalers	241 to 253
(d) Form for manufacturers	254 to 260
(e) Questionnaire to Retail Trade Associations	261 to 262

ENQUIRY INTO LARGE RETAILERS

Selective Employment Tax Enquiry

GENERAL NOTES

The Government has asked the Department of Applied Economics to carry out an independent enquiry into the effects of the Selective Employment Tax (SET) on the service trades. The Department is beginning its investigation by approaching a representative selection of retailers.

These notes cover general points about the enquiry, and we ask you to read them before completing the enclosed Tables and the Questionnaire. There are in addition explanatory notes which deal with the details of Tables 1 and 3. For companies with activities besides retailing, there is special guidance below as to what part of their business to cover.

If you have any difficulty in completing either the Questionnaire or the Tables, please do not hesitate to contact Mr. (Extension

), who is the member of the research team dealing with your company.

PROCEDURE

We have asked you to enter a date on the reply post-card, by which you expect to return the forms. We hope very much that it will be before July 31st 1968.

When you have returned the forms, we would like to have an interview with the appropriate official(s) in your company. This meeting would enable you to explain and elaborate the information appearing in the forms and give us the opportunity of discussing the policy adopted by your company on such matters as prices and employment.

CONFIDENTIALITY

The information that you give will, of course, be treated as strictly confidential, and seen only by the staff engaged on the enquiry. Any aggregates published will be so arranged as to prevent the disclosure of figures relating to your company unless you agree in writing to some particular relaxation of this rule.

FIELD TO BE COVERED

In principle we would like the information provided to cover the whole of your retail trade and to exclude all non-retail activities; we recognise, however, that many essentially retail businesses include sections engaged in other activities and that staff and expenses associated with these other activities cannot easily be excluded (even by a reasonable estimate). We shall depend on your help in deciding what it is most useful to send us. The following notes are intended to provide broad guidance in some of the more straightforward cases (in complicated cases more than one of these notes may apply).

(a) *Businesses with more than one shop.* Please cover whole retail business including depots which serve only your own shops or concessions.

(b) *Retailer/Wholesaler.* Where you have a large wholesale business for which it would be possible to make a separate return, please give the information here for retailing only, and ask us to send you a separate form for your wholesale business. Where wholesaling is a relatively small part of your trade and cannot be easily separated, please include it on this form.

(c) *Retailer/Manufacturer.* Where you have a large manufacturing business, which can be separated from your retail activities, please give the information for retailing only. When answering questions about the margin in your retail business, please calculate this on the basis of the value at which goods are transferred to the distributive department.

Where manufacturing is a relatively small part of your business and cannot easily be separated, please include it on this form.

(d) *Retailers with other activities.* Where you have some other important business outside retailing (e.g. building or printing) which can be separated from your retail activities, please give the information for retailing only. Where these activities are a relatively small part of your business and cannot easily be separated, please include them on this form.

(e) *Group companies.* If your company in fact consists of a group of retail companies, we would like to cover the whole of your business. If some of these companies have very different characteristics (e.g. mail-order) we would like a separate return for each of these. Where companies are doing essentially the same type of business, a combined return would be perfectly satisfactory to us if that is more convenient for you. We will gladly send you as many forms as you require: if you would like us to approach any companies separately, we will of course do so.

(f) *Acquisitions.* If during the period 1965-7 you acquired substantial subsidiaries (which you continue to run as separate businesses) we would like to receive separate returns for the original business and for each of the subsidiaries acquired. Where you have incorporated the subsidiaries into your original business, please base your answers on what was covered by your accounts for that period.

These notes cannot cover every eventuality. Please bear in mind that consistency over the period is more important for us than conformity to any standard definition. If you are in difficulty, do not hesitate to contact us.

NOTES ON TABLES 1 AND 3

Where the information requested in the Tables is not readily available from your ordinary records, please make a reasonable estimate of the item. When in doubt, please bear in mind that consistency over the period is more important for our purposes than conformity to a standard definition.

TABLE 1

1. *Total Sales*

Please deduct *all* discounts given. Include hire purchase sales at cash value plus charges for credit extended; do not deduct any allowance for goods taken in part exchange (see note to line 2); do not allow for bad debt losses (see note to line 3). Include sales of departments run by concessionaires *only* if you provide the staff; otherwise omit them entirely. Include sales of restaurants, hairdressing departments, etc. if you treat them as part of your retail business (see General Notes on 'Field to be Covered').

2. *Gross Profit*=Sales-Purchases+End Stock-Initial Stock (stock valued at cost). Allowances for goods taken in part exchange should be regarded as purchases. The cost of goods is the invoice cost of goods purchased (allowing for any settlement discounts) plus Purchase Tax, and carriage inwards if charged separately.

3. *Expenses (excluding rent and interest)*

All current expense items and depreciation permitted in computing your tax (other than the cost of goods, rent and interest). Include provisions for bad debt losses, less recoveries.

4. *Payroll*

Include all salaries and wages, commission earnings, bonuses, employer's contribution to National Insurance and pension funds, Selective Employment Tax. Salaries of working proprietors should be included. Exclude staff welfare expenditure other than the above items.

8. *Stocks*

Balance sheet value at end of financial year (please note any change in method of valuations).

TABLE 3

In this Table we should like you to do two things. In the first part you are asked to give information about the gross margins for each of the different commodity groupings or sections of your business for which you dissect your figures. We appreciate that different companies use different classifications of goods, but we ask you to enter an informative title for each of your sections in the first column. (If in 1966 or 1967 you have split one group into two or more groups, please combine the figures for the later years to keep in line with 1965. Ignore minor changes in classification.)

In the second part of the Table, you are asked to combine those of your own statistics which seem to fall under each of the categories shown ('Groceries and Provisions', 'Clothing', etc.), so as to give an overall figure which will be roughly appropriate to that category. (If some of your sections do not fit at all well under any main category, please do not include them in any combined figure.)

Include any services (such as hairdressing or restaurants) which you treat as part of your retail business in the first part of the Table, but leave these sections out of the second part of the Table.

Gross Margin

By the gross margin we mean selling price less cost as a percentage of selling price, including Purchase Tax in both cost and selling price. We are aware that figures of this kind are produced by many different methods, e.g. by reference to invoices passed for payment with allowance for mark-downs but not for pilferage etc. Any method used consistently for all years is satisfactory to us, but we would like you to describe your method in the appropriate space and in particular to make clear how you treat mark-downs, pilferage, etc. If actual figures are not available, estimates or targets are much better than nothing, provided that you feel that they give a reasonable picture of the trends.

Please give the gross margin for the trading year most closely corresponding with the calendar year shown, and give the percentage to one decimal place (where possible).

Per Cent from Manufacturer

Please indicate for each section of your business the percentage of the goods which you are now buying direct from a manufacturer or importer: rough estimates are sufficient—e.g. '80 per cent' or 'negligible'.

Own Brands

Where more than 10 per cent of your sales in any section of your business are of your own brand (although not necessarily of your own manufacture), please indicate the approximate percentage of your sales accounted for by your own brands. (Do not include the brands of voluntary buying groups.)

SELECTIVE EMPLOYMENT TAX ENQUIRY

Name of company.....

End date of financial year.....

TABLE 1 REVENUE AND EXPENDITURE

Please complete for the financial years most closely corresponding to the calendar years shown, and indicate by a tick whether you are replying in £☐ or £'000 ☐

Please read the Notes on Table 1 before completing the Table.

Item	1965	1966	1967	For office use
1. Total Sales				
2. Gross Profit				
3. Expenses (excluding rent and interest)				
<i>Of which</i>				
4. Payroll				
5. Rates				
6. Net Profit from Trading (before rent and interest)				
7. Rateable Value of Trading Premises				
8. Stock at end of year				
9. Selective Employment Tax Paid (net of any refunds)				
10. *Sales on Wholesale Terms				
11. *Sales of goods produced by retail business				
For office use				

* These items need only be completed where they represent more than 5 per cent of your sales.

Please also name any non-retail activities included in this return which represent an important part of your business:

.....

.....

TABLE 2 EMPLOYEES *

Please complete for the weeks shown. We appreciate that exact figures will often not be available: what we need are estimates which provide a reasonable picture of the trends. The most important item is the total.

Week Ending	Full-time			Part-time			Total	For Office Use
	Adult Male	Adult Female	Juveniles (under 18)	Less than 8 hours	8-20 hours	21-29 hours		
May 1 1965								
Oct. 30 1965								
April 30 1966								
Oct. 29 1966								
April 29 1967								
Oct. 28 1967								
April 27 1968								
For Office Use								

* Include those temporarily absent through sickness or holidays, and all working proprietors. 'Full-time' means working thirty hours or more a week, 'part-time' means less than thirty hours. Adult means eighteen or more years of age, juvenile means under eighteen.

TABLE 3 GROSS MARGINS

Please give the following information for each section of your business for which such percentage margins are available. For guidance in completing this Table, please see the Notes on Table 3.

	Section	Gross Margins (per cent)*				Per cent from Manu- fac- turer	Per cent Own Brand
		1965	1966	1967	1968 Forecast		
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.		(Table continued on next page)					
For Office Use							

* Please give a broad description of method of arriving at these percentages:

TABLE 3 GROSS MARGINS—(continued)

	Section	Gross Margins (per cent)*				Per cent from Manu- fac- turer	Per cent Own Brand
		1965	1966	1967	1968 Forecast		
21.							
22.							
23.							
24.							
25.							
26.							
27.							
28.							
29.							
30.	(Please use a continuation sheet if necessary).						
For Office Use							

* Please give a broad description of method of arriving at these percentages:

COMBINED FIGURES FOR MAIN CATEGORIES

Category	Gross Margins (per cent)				For Office Use
	1965	1966	1967	1968 Forecast	
1. Groceries and Provisions					
2. Other Food					
3. Alcoholic drink					
4. Tobacconists' wares					
5. Clothing					
6. Footwear					
7. Furniture, household textiles, radio and TV, appliances, ironmongery, household goods, etc.					
8. Books, newspapers and magazines					
9. Pharmacy, toilet, photographic, etc.					
10. Other goods					
For Office use					

SELECTIVE EMPLOYMENT TAX ENQUIRY—QUESTIONNAIRE

Please tick the appropriate box or boxes. Where you feel that additional information on any topic would be helpful, or you would like to discuss some particular issue at the interview, you are invited to add comments (using a separate sheet if necessary).

A. PRICING POLICY AND SERVICE

1. Is it your policy to reconsider each year the gross margin for which you are aiming?

Yes ☐ No ☐

If so, which of the following factors do you take into account?

Changes in your costs ☐

Keeping in line with competitors ☐

Other (please specify).....

2. Over the past three years, was there any occasion on which you made a general change in the course of your trading year in the gross margin for which you were aiming?

(a) throughout most of the business? Yes ☐ No ☐

(b) for some important part of the business? Yes ☐ No ☐

If yes, please give details (date, reason, extent of change, etc.)

3. Comparing the first half of 1968 with the first half of 1966,

(a) Have you been able to reduce the cost of goods purchased in any of the following ways:

Obtaining better terms from existing suppliers by

(a) placing larger orders? Yes ☐ No ☐

(b) otherwise? Yes ☐ No ☐

Seeking alternative suppliers

(a) at home? Yes ☐ No ☐

(b) overseas? Yes ☐ No ☐

Joining a voluntary buying

group Yes ☐ No ☐

(b) Have you changed your policy with regard to bargain offers?

More ☐ Fewer ☐ No change ☐

(c) Have you pursued a general policy of narrowing the selection offered for each category of goods?

Yes, to a considerable extent ☐ Yes, slightly ☐ No ☐

(d) Have you increased the number of lines where you carry your own brand?

Yes ☐ No ☐

(e) Have you changed your policy with regard to discounts given to customers?

Yes (please specify main changes) ☐ No ☐

(f) Have there been other changes in your pricing policy?

4. In the period March 1966 to March 1968, did you change your policy with regard to:

- (a) Delivery
Charges introduced ☐ Frequency reduced ☐ No change ☐
Reduction in area covered ☐ Other changes
- (b) Credit given to customers
Less readily given ☐ Charge increased (or introduced) ☐
Other changes..... No change ☐
- (c) Availability of counter staff (in proportion to volume of business)
More ☐ Fewer ☐ No change ☐
- (d) Wrapping
Simpler method ☐ Charges for fancy wrapping ☐ No change ☐
- (e) Advertising (as percentage of turnover)
More ☐ Less ☐ No change ☐
- (f) Display
More expensive ☐ Less expensive ☐ No change ☐
- (g) Advice to customers and 'free services'
More ☐ Less ☐ No change ☐
- (h) Other changes in the character of service (please describe major changes)

5. In the last two years, how many branches have you

- (a) closed?
- (b) converted to self-service? wholly..... partially

6. Comparing the first half of 1968 with the first half of 1966, has there been an increase in:

- (a) the amount of processing or packing done by suppliers
Yes ☐ No ☐
- (b) the contribution made by manufacturers to the promotion of their brands (e.g. advertising or arrangement of window display by manufacturers' representatives).
Yes (please specify) ☐ No ☐

B. EMPLOYMENT

7. Did the introduction of SET in 1966 lead to:

- (a) a tighter assessment of labour requirements?
Yes ☐ No ☐
- (b) change in your policy with respect to the proportions of different types of labour employed?
Replace part-time by full-time ☐
Replace part-time for whom SET liable by part-time not liable for SET ☐
Replace adult male by adult female ☐ Vice Versa ☐
Replace adults by juveniles ☐ Vice Versa ☐
Reduce part-timers by increasing working hours for full-time or other part-time workers ☐

(c) concentration on skilled rather than unskilled staff?

Yes ☐ No ☐

(d) dismissal of staff beyond retiring age? Yes ☐ No ☐

(e) change in the standard of performance required of staff?

Yes ☐ No ☐

(f) change in the use of self-employed labour or sub-contractors?

Yes (please give examples) ☐ No ☐

(g) other changes in employment policy.....

8. Did the revised rates introduced in September 1967 for part-time workers employed for less than twenty-one hours cause you to make any changes in your employment policy?

Yes (please specify) ☐ No ☐

9. Has SET led you to:

(a) accelerate your plans to convert departments or whole shops to self-service?

Yes ☐ No ☐

(b) accelerate your plans to introduce more self-selection?

Yes ☐ No ☐

(c) make increased use of vending machines?

Yes ☐ No ☐

C. GENERAL QUESTIONS

10. Is there any part of your retail business for which SET is refunded?

Yes (please give details) ☐ No ☐

11. Have you changed the organisation of production departments (e.g. workrooms) so that they would qualify for a SET refund?

Yes ☐ No ☐

12. Is it your impression that SET has led to an increase in the price of services which you buy (e.g. professional fees, contract cleaning)?

Yes ☐ No ☐

Can you provide specific instances of important increases which you feel have been caused by SET?

13. Are you selling in competition with traders who do not pay SET?

Yes ☐ No ☐

If Yes, please give details in the space for comments on page 5.

14. Has the forthcoming increase in SET led you to make any definite plans for policy changes similar to those covered in the above questions?

Yes ☐ No ☐

If Yes, please give details in the space for comments on page 5.

D. COMMENTS

We invite you to comment (in the space below) on any points not covered in the questions above which you feel should be brought to our attention.

Please give the name, address and telephone number of the person to be contacted to arrange an interview.

Signed.....

Date.....

FORMS FOR SMALLER RETAILERS

CODE:.....

CONFIDENTIAL

SELECTIVE EMPLOYMENT TAX ENQUIRY—(RETAILERS)

Trade:

Number of outlets:.....

Total number of employees:.....

(including working proprietors etc.)

Please tick appropriate box

EMPLOYMENT

1. Did the increase in SET in September, 1968 lead you to make a tighter assessment of your labour requirements?

Yes ☐

No ☐

2. Did the change in 1968 in the SET provisions for part-time employees and employees of pensionable age lead you to make increased use of such labour?

Yes ☐

No ☐

PRICING POLICY

3. When SET was increased in 1968 did you change the gross margin for which you were aiming on a significant number of lines?

Yes, on some lines ☐

Yes, on most lines ☐

No ☐

REVENUE AND EXPENDITURE

Please give the information for your financial years which correspond most closely to the calendar years shown. (Please see notes)

End of your financial year:.....

Item	1965	1966	1967	For office use
1. Total sales				
2. Gross profits				
3. Rent and rates				
4. Payroll (including SET)*				
5. Miscellaneous expenses (please see note)				
For office use:				

* N.B. If you can give a reasonable estimate of how much is included on account of SET please give it here for

1966 £

1967 £

If there are any special reasons which have caused large changes in any of the above items (e.g. extension of premises, taking into partnership a senior employee), please note them below.

ANY OTHER COMMENTS

In the space provided below, we invite you to make any comments that you may think would help us in our enquiry. Such comments should cover any action which you have taken to combat the increase in expenses caused by the introduction of SET in 1966 or its increase in 1968. If there are any other factors which have had such an important influence on your business that you think we should know about them in using your figures, please indicate these briefly.

Please return this form in the reply paid envelope to the Department of Applied Economics, University of Cambridge by November 30th.

NOTES TO TABLE

These definitions are for broad guidance only. Please keep to them when you can do so without difficulty, but so long as you are consistent between one year and another, your figures will be useful.

1. *Total sales:*

Please deduct all discounts given. Include hire-purchase sales at cash value plus charges for credit extended; do not deduct any allowance for goods taken in part exchange (see note to item 2), do not allow for bad debt losses (see note to item 5).

Include any receipts from repairs and other services provided.

2. *Gross profit:*

Sales *minus* purchase *plus* end stock *minus* initial stock (stock valued at cost). Allowances for goods taken in part exchange should be regarded as purchases. The cost of goods is the invoice cost of goods purchased (allowing for any settlement discounts) plus Purchase Tax and carriage inwards, if charged separately.

4. *Payroll:*

Include salaries and wages, bonuses, employers' contributions to National Insurance stamps (including SET) and to pension funds. For proprietors and partners include only payments to them which are allowed as a cost for tax purposes. Exclude staff welfare expenditure other than above items.

5. *Miscellaneous expenses (excluding rent and interest):*

Include all current expense items and depreciation permitted in computing your tax except interest, the cost of goods, rent and rates, and payroll. Include provisions for bad debt losses less recoveries.

SELECTIVE EMPLOYMENT TAX ENQUIRY

GENERAL NOTES FOR WHOLESALERS

The Government has asked the Department of Applied Economics to carry out an independent enquiry into the effects of the Selective Employment Tax (SET) on the service trades. The Department began its enquiry by starting a study of retail trades and it has had a good response to the questionnaire it sent to firms in these trades. The Department is now extending its study to the wholesale and allied trades.

These notes cover general points about the enquiry, and we ask you to read them before completing the enclosed Tables and the Questionnaire. There are in addition explanatory notes which deal with the details of the Tables. For companies with other activities besides wholesaling, there is special guidance below as to what part of their business to cover.

If you have any difficulty in completing either the Questionnaire or the Tables, please do not hesitate to contact Mr. Pratten (Cambridge 58944, Ext. 272) who is the member of the research team dealing with your company.

PROCEDURE

We have asked you to enter a date on the reply post-card, by which you expect to return the forms. We hope very much that it will be before 30th November 1968.

When you have returned the forms, we would like to have an interview with the appropriate official(s) in your company. This meeting would enable you to explain and elaborate the information appearing in the forms and give us the opportunity of discussing the policy adopted by your company on such matters as employment, and the effects of competition from manufacturers. We enclose a duplicate set of forms so that you can make a copy of your forms to retain for use at the interview.

CONFIDENTIALITY

The information that you give will, of course, be treated as strictly confidential, and seen only by the staff engaged on the enquiry. Any aggregates published will be so arranged as to prevent the disclosure of figures relating to your company.

FIELD TO BE COVERED

In principle we would like the information provided to cover the whole of your operations which are concerned with wholesaling (including activities such as transport and servicing insofar as they are complementary to your wholesaling business), and to exclude other activities; we recognise, however, that many essentially wholesale businesses include sections engaged in other activities and that staff and expenses associated with these other activities cannot easily be excluded (even by a reasonable estimate). We shall depend on your help in deciding what it is most useful to send us. The following notes are intended to provide broad guidance in some of the more straightforward cases (in complicated cases more than one of these notes may apply).

(a) *Manufacturers*

If you have a large manufacturing business, and you operate a separate wholesale establishment(s) for which you pay SET, please give information for

wholesaling only. When answering questions about the margin for your wholesale business, please calculate this on the basis of the value at which goods are transferred to your wholesale department.

(b) *Wholesalers who do some manufacturing*

Where manufacturing is a relatively small part of your business and cannot easily be separated, please include it when completing the tables.

(c) *Wholesaler/Retailer*

If you have a large retail business with separable records, please give the information here for wholesaling only. Where retailing is a relatively small part of your trade and cannot easily be separated, please include it on this form.

(d) *Wholesalers with other activities*

Where you have some other important business outside wholesaling (e.g. building or printing) which can be separated from wholesaling, please give the information for wholesaling only. Where these activities are a relatively small part of your business and cannot easily be separated, please include them on this form.

(e) *Businesses with more than one establishment*

There is no need to complete separate returns for each establishment.

(f) *Group of companies*

If your company in fact consists of a group of wholesale companies, we would like to cover the whole of your business. Where companies are doing essentially the same type of business, a combined return would be perfectly satisfactory to us if that is more convenient for you. We will gladly send you as many forms as you require: if you would like us to approach any companies separately we will of course do so.

(g) *Firms operating in two or more wholesale trades*

If your business covers two types of activity which you consider it best to keep separate, please complete separate forms for each trade.

(h) *Acquisitions*

If during the period 1965-7 you acquired substantial subsidiaries (which you continue to run as separate businesses) we would like to receive separate returns for the original business and for each of the subsidiaries acquired. Where you have incorporated the subsidiaries into your original business, please base your answers on what was covered by your accounts for that period.

These notes cannot cover every eventuality. Please bear in mind that consistency over the period is more important for us than conformity to any standard definition. If you are in difficulty, do not hesitate to contact us.

NOTES TO TABLES

Where the information requested in the Tables is not readily available from your ordinary records, please make a reasonable estimate of the item. When in doubt, please bear in mind that consistency over the period is more important for our purposes than conformity to a standard definition.

TABLE I

1. *Total Sales on Own Account*

Please exclude Purchase Tax and any export rebates you received for export sales. Deduct any allowances for goods returned and *all* quantity and cash discounts given (including net discounts given through membership of a voluntary chain). Do not deduct any allowance for goods taken in part exchange (see note 2), or for bad debts. Include charges made for delivery.

2. *Cost of Goods Sold on Own Account* = Initial Stock + Purchases — Stock at end of year. Please exclude Purchase Tax from purchases and deduct all discounts (including any discounts, less expenses, received as members of a wholesalers' voluntary buying group) from purchases. Please *include* any charges for carriage inwards, customs duty payable by you direct to HM Customs and Excise and any allowance for goods taken in part exchange as purchases.

3. *Gross Profits on Above Goods* = Total Sales (1) — Cost of Goods Sold (2).

4. *Commission Earned on Sales Made as an Agent*

Include allowances received for expenses incurred in connection with sales made for a commission.

5. *Total Trading Income*

Gross Profit (3) + Commissions Earned on Sales (4) + Other Trading Income. Please include any export rebate receivable and commissions receivable, other than on sales. Exclude rent and interest received and SET refunds.

6. *Expenses (excluding rent and interest)*

Please include all current expense items and depreciation permitted by the Inland Revenue in computing your tax (other than the cost of goods sold, rent, and interest on debentures, bank and other loans). Include provisions for bad debt losses, less recoveries, and all transport and delivery costs, except payments for carriage inward (see cost of goods sold). *Depreciation* permitted in computing tax includes initial and annual allowances and balancing allowances less charges, but *not* investment allowances or grants.

7. *Selective Employment Tax*

Include payments of SET net of any refunds received.

8. *Payroll*

Include all salaries and wages, commission earnings of employees, bonuses, employer's contribution to National Insurance and pension funds. Salaries of working proprietors should be included, but not their share of profits. Exclude Selective Employment Tax, commissions not paid to employees, and staff welfare expenditure other than the above items.

10. *Net Trading Income*

Total Trading Income (5) — Expenses (6).

11. *Stocks*

Please note any change in the method of valuation.

12. *Trade Debtors*

Please deduct provision for bad and doubtful debts.

15. *Sales on Retail Terms*

Please exclude sales to your own retail branches if they are included in Total Sales at wholesale prices.

TABLE 2

Transport Costs

We realise that separate figures may not be available for some of the items in this table. Please give the best estimates you can for these items.

1. *Amounts Payable to Other Organisations*

Please give an estimate of the total amount payable to all other organisations for transporting goods (including payments for parcel post).

2. *Payroll*

For a definition of payroll see the notes to Table 1 item 8. Include the payroll for the crew of delivery vehicles, van salesmen, and mechanics, but not staff engaged in loading and unloading at your warehouse or depots.

3. *SET (net of refunds)*

Include SET, net of refunds, for the employees for whom payroll figures are given.

4. *Depreciation of Vehicles (excluding cars)*

For a definition of depreciation see the notes to Table 1 item 6.

6. *Estimate of Other Expenses*

Where possible, we should like the estimate to cover the following items: petrol, oil, repairs, spare parts, parking, garaging, insurance, taxation of vehicles. Do not include any internal allocation of overheads to your transport department.

TABLE 4

In this table we should like what information you can give about the gross margin for sub-divisions of your business. We recognise that margins vary for different combinations of commodity groups, classes of customer and types of trade (e.g. cash-and-carry, traditional wholesaling, group wholesaling). If you dissect your business in any way which gives gross margins for any of these combinations, please describe the type of trade in the first column and enter the gross margins in the other columns of the table. It does not matter if these figures cover only part of your business.

By gross margin we mean selling price less cost, as a percentage of selling price. We are aware that figures of this kind are produced by many different methods, e.g. by reference to invoices passed for payment with allowance for quantity but not cash discounts. Any method used is satisfactory to us, but where possible we should like the figures for all years to be calculated on a consistent basis. We should like you to describe your method of calculating margins in the appropriate space below the table, and in particular to make clear how you deal with discounts and Purchase Tax. For preference we should like you to include freight inwards, where this is paid for separately as part of the costs of goods, but to exclude Purchase Tax from the cost and selling price.

Please give the gross margin for the trading year most closely corresponding with the calendar year shown, and give the percentage to one decimal place (where possible).

TABLES FOR WHOLESALE TRADERS

Name of Company.....

End date of financial year.....

TABLE 1. REVENUE AND EXPENDITURE

Please complete for the financial years most closely corresponding to the calendar years shown, and indicate by a tick whether you are replying in

£ ☐ or £'000 ☐

Please read the Notes on Table 1 before completing the Table.

	1965	1966	1967	For office use
1. Total sales of Goods on own account				
2. Cost of Goods Sold on own account				
3. Gross Profit on the above goods				
4. Commissions on Sales made as an agent (if any)				
5. Total Trading Income				
6. Expenses (including depreciation, excluding rent and interest)				
of which: 7. Selective Employment Tax (net)				
8. Payroll				
9. Rates				
10. Net Trading Income				
<i>Balance Sheet data (at end of year)</i>				
11. Stocks				
12. Trade Debtors				
13. Trade Creditors				
14. Rateable Value of Premises				
15. Sales on Retail Terms*				
16. Cash-and-Carry Sales*				
17. Export Sales*				
For Office Use	1			
	2			
	3			
	4			
	5			
	6			
	7			

Please name any non-wholesale activities included in this return which represent an *important* part of the business included in this return.

* These items need only be completed where they represent more than 5 per cent of your total sales. Estimates are sufficient for these items.

TABLE 2. TRANSPORT COSTS

In view of the anomalies which SET inevitably raises for transport, we should like information about the costs of transport. Please give estimates for the financial year most closely corresponding to the calendar year 1967 and give the 1965 figures if you have made any material change in your policy about using your own transport for delivery between 1965 and 1967.

Item		1967	1965 (see above)	For Office use
1. Amounts payable to other organisations for carrying goods				
<i>Expenses of operating your own delivery vehicles:</i>				
2. Payroll (excluding SET)				
3. SET (net of refunds)				
4. Depreciation of vehicles				
5. Cost of hiring vehicles (exclude hire purchase payments)				
6. Estimate of other expenses for operating your vehicles:				
7. Total of 1 to 6				
For office use	1			
	2			
	3			
	4			

TABLE 3. EMPLOYEES

Please give the numbers of employees for the weeks shown. We appreciate that exact figures will often not be available: what we need are estimates which provide a reasonable picture of the trends. The most important item is the total.

Numbers ¹

Week Ending	Full-time			Part-time			Total	Of which Mainly Engaged in Transport ²	For Office Use
	Adult Male	Adult Female	Juveniles (under 18)	Less than 8 hours	8-20 hours	21-29 hours			
May 1 1965									
April 30 1966									
April 29 1967									
April 27 1968									
Oct. 25 1968									
For Office Use									

¹ Include those temporarily absent through sickness or holidays, and all working proprietors. 'Full-time' means working thirty hours or more a week, 'part-time' means less than thirty hours. Adult means eighteen or more years of age, juvenile means under eighteen.

² We should like information about the number of employees engaged in transporting and delivering goods. Where possible include the crew of vehicles and mechanics, but exclude loaders at your warehouse. Please give in the table the most relevant series of figures which your information permits and say here which types of employee are included.

TABLE 4. GROSS MARGINS FOR SECTIONS OF YOUR BUSINESS

Please give the following information for each section of your business for which such percentage margins are available. For guidance in completing this Table, please see the Notes on Table 4.

	Section of your Business	Gross Margins (per cent) ¹				For Office Use
		1965	1966	1967	1968 Forecast	
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
Please use a continuation sheet if necessary						
For Office Use						

¹ Please give a broad description of the method of arriving at these percentages:

SELECTIVE EMPLOYMENT TAX ENQUIRY

QUESTIONNAIRE FOR WHOLESALE TRADERS

Please tick the appropriate box or boxes. Where you feel that additional information on any topic would be helpful you are invited to add comments (using a separate sheet if necessary).

SECTION I

Competition from Manufacturers (1)

1. Is the competition of manufacturers who sell direct, serious for any of the goods you sell?

Yes ☐

No ☐

If yes, please answer the other questions in this section. If no, please turn to the next section.

2. Are your main competitors manufacturers, rather than other wholesalers, for any of the goods you sell?

Yes (for nearly all the goods) ☐

Yes (for less than 50 per cent of the goods) ☐

Yes (for more than 50 per cent of the goods) ☐

No ☐

3. For the types of goods for which the competition of manufacturers is most serious for you, please give the following information. (If you wish to draw our attention to other types of goods for which the competition of manufacturers is serious and has substantially increased since 1966, you are invited to give similar information on a continuation sheet.)

(a) The type of goods.....

(b) Your approximate sales of these goods in 1967 £.....

(c) Please give the names of up to four manufacturers who sell these goods in competition with you, choosing the most important competitors.

Name of Manufacturer	Address	Do you buy from this manufacturer?
----------------------	---------	------------------------------------

.....	Yes <input type="checkbox"/> No <input type="checkbox"/>
-------	-------	--

.....	Yes <input type="checkbox"/> No <input type="checkbox"/>
-------	-------	--

.....	Yes <input type="checkbox"/> No <input type="checkbox"/>
-------	-------	--

.....	Yes <input type="checkbox"/> No <input type="checkbox"/>
-------	-------	--

If you know that manufacturers do not have SET refunded for the staff of their wholesale establishments from which they compete with you, please treat them as wholesalers and *not* as manufacturers for the purpose of this section.

- (d) For the type of goods described in 3(a) please complete the following particulars. Give figures for your trade in row (i) and write Yes or No in the other spaces.

	<i>Type of Customer</i>				
	National or Regional Retailers	Other Large Retail- ers	Small Retail- ers	Indus- trial Buyers	Others (e.g. caterers) Please Describe
(i) Approximate per cent of your sales of these goods sold to these types of customer in 1967%%%%%
(i) Do manufacturers compete for this type of business?	.....	.....	.....	.....	.....
(iii) Are manufacturers, rather than other wholesalers, your main competitors for this type of business?	.....	.....	.....	.....	.....
(iv) Have manufacturers been gaining, as against yourself, for this type of business since the first half of 1966?	.....	.....	.....	.....	.....
(v) If manufacturers have been gaining against yourself for any type of business since the first half of 1966, please describe the methods manufacturers have used to intensify their competitiveness, e.g. by sending out more travellers or offering more credit.					
(e) Have you been prevented from increasing your percentage gross margins (on sales excluding purchase tax) for the goods described in 3(a) since the first half of 1966?	Yes <input type="checkbox"/> No <input type="checkbox"/>				
If yes, have you been prevented from increasing your margins because:					
(i) Manufacturers who sell to retailers at standard prices are still selling at much the same percentage above the price at which they supply you?					Yes <input type="checkbox"/> No <input type="checkbox"/>
(ii) Of competition from manufacturers of rival goods who sell to your customers?					Yes <input type="checkbox"/> No <input type="checkbox"/>
(iii) Of competition from other wholesalers?					Yes <input type="checkbox"/> No <input type="checkbox"/>
(iv) Margins are determined by a custom of the trade, and the standard margin has not been increased?					Yes <input type="checkbox"/> No <input type="checkbox"/>

4. Considering your trade as a whole, have you made any effort to shift your trade into types of business (e.g. imported products) for which the competition of manufacturers is less keen since the first half of 1966?

Yes ☐ No ☐

If yes, please describe the changes made:

5. *Comments on Competition from Manufacturers*

We invite you to comment on a separate sheet on any points on this subject which you feel should be brought to our notice. For example has the pressure on your margins resulting from increased competition from manufacturing led you to cut out the less remunerative parts of your business.

SECTION II

Margins and Changes in Services Provided

1. *Policy on Margins*

(a) How are your percentage gross margins generally determined?

- (i) By selling at a price suggested by manufacturers ☐
- (ii) By a custom of the trade ☐
- (iii) By your own decision based on your costs ☐
- (iv) By your own decision to keep in line with other wholesalers ☐
- (v) Other (please specify) ☐

(b) If there have been any important changes in the way your margins are generally determined since the beginning of 1966, please state the changes here (e.g. RPM abolished).

2. *Changes in Services Provided*

Since the first half of 1966 have you made any changes in the services you provide for customers, with a view to reducing expenses (e.g. by ceasing to supply small retailers, raising the minimum size of order, starting or extending a cash-and-carry trade, calling on customers less frequently, stricter control of credit, less frequent deliveries).

Yes ☐ No ☐

If yes, please describe the main changes and the reasons for them (e.g. policy changes made by your competitors or increased labour costs).

SECTION III

Employment

1. Did the introduction of SET in 1966 lead to any of the changes set out below? Please give examples of important changes.

(a) A tighter assessment of labour requirements?

Yes ☐ No ☐

(b) A change in your policy about the proportions of different types of labour employed?

- Replace part-time by full-time ☐
- Replace part-time for whom SET payable by part-time for whom SET not payable ☐
- Replace adult male by adult female ☐ Vice versa ☐
- Replace adults by juveniles ☐ Vice versa ☐
- Concentrate on skilled rather than unskilled staff ☐ Vice versa ☐

(c) Dismissal of staff beyond retiring age?

Yes ☐

No ☐

(d) Change in the use of self-employed labour, agents, or sub-contractors?

Yes ☐

No ☐

2. Did the revised rates introduced in *September 1967* for part-time workers employed for less than twenty-one hours cause you to make increased use of part-time workers?

Yes ☐

No ☐

3. Have the revised refunds for part-time employees and refunds for elderly employees, introduced in *September 1968* caused you to make, or plan, either of the following:

Increased use of part-time employees?

Yes ☐ No ☐

Increased use of elderly employees?

Yes ☐ No ☐

SECTION IV

Other Measures to Reduce Costs

1. Since the first half of 1966 has there been a substantial increase in the amount of processing or packaging done by suppliers on the goods you handle?

Yes (please specify) ☐

No ☐

2. Since the first half of 1966 have you:

(a) Merged with, or taken over, other firms?

Yes ☐ No ☐

(b) Reduced the number of warehouses or depots you (or the firms you merged with or took over) operate?

Yes ☐ No ☐

(c) Introduced more mechanization in your warehouse?

Yes ☐ No ☐

(d) Lowered your target stock/sales ratio?

Yes ☐ No ☐

(e) Made important changes to the methods used for handling and packing goods for delivery (if yes, please specify)?

Yes ☐ No ☐

(f) Started to use the services of a computer?

Yes ☐ No ☐

(g) Joined a wholesalers' voluntary buying group?

Yes ☐ No ☐

(h) Made other changes to reduce costs? (If yes, please specify)

Yes ☐ No ☐

SECTION V

SET Refunds

1. Is there any part of the business covered by this questionnaire for which SET is refunded?

Yes (please give details) ☐

No ☐

2. Have you changed the operations, organization or location of any part of your business in order to qualify for a SET refund on all, or part of the business?

Yes ☐

No ☐

If yes, please describe overleaf what you did and state the number of employees involved. If the new arrangements involved conversion costs, or an increase in current costs, other than SET, particulars would be very useful.

Comments

We invite you to comment overleaf on any points not covered in the questions above which you feel should be brought to our attention.

Please give the name, address and telephone number of the person to be contacted to arrange an interview.

Signed Date.....

Space for General Comments

SELECTIVE EMPLOYMENT TAX ENQUIRY GENERAL NOTES FOR MANUFACTURERS

These notes cover general points about the enquiry, and we ask you to read them before completing the Questionnaire and Tables. If you have any difficulty in completing the Questionnaire, please do not hesitate to contact Mr. Ward (Cambridge 58944, Extension 271), who is the member of the research team dealing with your company.

PROCEDURE

We would like you to complete and return the enclosed forms as soon as possible. We hope very much that it will be possible for you to return them by the end of April.

When we have had an opportunity of studying the forms returned to us, it may be necessary for us to have an interview with the appropriate official(s) in your company, or you may wish to have such a meeting to enable you to explain and elaborate the information given. We enclose a duplicate set of forms so that you can make a copy of your forms to retain for this purpose.

CONFIDENTIALITY

The information that you give will, of course, be treated as strictly confidential, and seen only by the staff engaged on the enquiry. Any aggregates published will be so arranged as to prevent the disclosure of figures relating to your company.

FIELD TO BE COVERED

We are interested specifically in the distribution of goods manufactured by you, but not in your sales of goods manufactured by others. In some cases we may have asked you to make a return in respect of (e.g.) a chain of retail shops, and we apologise for having to approach you again. The following notes are intended to provide a broad guidance on the information to send us.

(a) *Businesses with more than one manufacturing establishment*

There is no need to complete separate returns for each establishment.

(b) *Group of Companies*

If your company in fact consists of a group of companies, we should like to cover the whole of your business. Where companies have essentially similar methods of distribution, a combined return would be perfectly satisfactory to us if that is more convenient for you. We shall gladly send you as many forms as you require: if you would like us to approach any companies separately we shall of course do so.

(c) *Firms operating in two or more trades*

If your business covers two types of activity which you consider it best to keep separate, please complete separate forms for each trade.

(d) *Acquisitions of manufacturing companies*

If during the period 1965-1968, you acquired manufacturing subsidiaries, we should like to have the return completed for the original business. If you are also able to complete separate returns for the subsidiaries then of course we should be very glad to receive them.

(e) Acquisitions of wholesale companies

If during the period 1965-8 you acquired wholesale subsidiaries (which you continue to run as separate concerns) which continue to do more trade in the goods of other manufacturers than your own, the information obtained from the figures given in Table 1 of the questionnaire will remain adequate. If you acquired wholesale subsidiaries, which previously did most of their trade in the goods of other manufacturers, but now deal mainly with your own goods, please give an estimate of the effect of this fact on the figures given in Table 1.

(f) Accuracy of information

We realize that in some cases the information which we are asking for may not be readily available or may not be precisely known. We should like to emphasize that in such cases a reasonable estimate will suffice.

SELECTIVE EMPLOYMENT TAX ENQUIRY

MANUFACTURERS

Please tick the appropriate box or boxes. Where you feel additional information on any topic would be helpful you are invited to add comments (using a separate sheet if necessary).

SECTION I

SET and Methods of Distribution

Subsection 1: SET

1. When you claim SET refunds from the Department of Employment and Productivity, do you have:

- (a) any difficulty in satisfying the DEP that your distribution and/or transport establishments are eligible for SET refunds?

Yes (please give details) ☐

No ☐

- (b) any other difficulties?

Yes (please give details) ☐

No ☐

2. About what proportion (if any) of your goods now goes through wholesale establishments of your own which do not qualify for SET refunds?

..... %

3. In order to reduce the number of your employees who do not qualify for SET refunds, have you:

(a) changed the method of distributing your goods? Yes ☐ No ☐

(b) changed the organisation of your sales or office staff? Yes ☐ No ☐

(c) made any other changes? Yes ☐ No ☐

If Yes to (a), (b) or (c), please:

(i) describe the changes made and indicate their effect on the number of people liable to SET.

(ii) give an estimate of any capital costs involved and any change in running costs (excluding SET) which has resulted.

Subsection 2: Methods of Distribution

4. Please indicate the value of sales of your own products going to each of the categories of customer shown in Table 1.

TABLE 1. SALES OF YOUR OWN PRODUCTS (AT EX-FACTORY PRICES)

Please complete for the calendar years shown. If you have any difficulty in giving figures for calendar years, please complete for financial years most closely to them and state the year end here

	£000			
	1965	1966	1967	1968
(i) Exports, including sales through export agents				
(ii) Sales through wholesalers*				
(iii) Sales direct to retail shops which you own				
(iv) Sales direct to retail shops which you do not own				
<i>of which</i> (a) to national and regional multiples				
(b) goods produced for the retailers' own brand				
(v) To other customers				
For office use				

* Do not include here sales to another member of your Group unless its sales include more than 50 per cent of goods supplied by producers outside your Group.

Sales to other wholesalers subsidiaries, distribution depots etc., should be included in Rows (iii) or (iv) as the case may be.

5. If there have been important changes in the relationship between your sales to wholesalers (Row (ii)) and your sales direct to retailers (Row (iv)), please comment on the main reasons. In particular: (1) is the movement a continuation of a previous trend? (2) do you consider that SET has played any part in the change?

6. In the case of retail shops which you do not own (Row (iv), Table 1) have you been pursuing a policy of:

(a) changing the geographical coverage of retailers which you are willing to supply?

Increase ☐ Decrease ☐ No Change ☐

(b) changing the size-range of retailers which you are willing to supply?

Increase ☐ Decrease ☐ No change ☐

(c) changing the range of kinds of retail shop which you supply? (e.g. supplying supermarkets as well as specialist tobacconists and confectioners.)

Increase ☐ Decrease ☐ No Change ☐

If Increase or Decrease to (a), (b) or (c), please give the main reasons for this policy, and say when the policy was first introduced.

7. Since the introduction of SET, have you made any important changes in the services which you provide for retailers and wholesalers? (e.g. changes in: packaging and processing, credit facilities, selling aids, the number of travellers, the frequency of delivery, after-sales services, etc.)

Yes ☐

No ☐

If Yes, please give details of the main changes made and state whether they affect the retailer more than the wholesaler or vice versa.

SECTION II

Prices to Retailers and Wholesalers

In this Section we are specifically interested in any difference in the percentage movement of your prices as charged to wholesalers and to retailers respectively. We have provided two Tables, Table A for goods on which you suggest retail selling prices, and Table B for other goods. In order to provide comparisons which will be meaningful for our enquiry, will you please proceed as follows:

(a) *Selection of Typical Items.* Please select from your current trade a number of important items which you regard as broadly representative so far as margins are concerned, and enter these in Column (1). If you also sold these items (or something closely similar) in 1966, please give figures for these goods for both years, as described below. If you did not sell any similar item in 1966, please choose for that year a substitute item which played much the same role in your sales, and mark the item in Column (1) with an asterisk.

(b) *Types of Wholesalers and Retailers to be considered in completing the Tables.*

(i) *For 1969*, please compare the terms on which you sell to a typical wholesaler with those on which you supply retailers who buy in the smallest quantities commonly sold by you.

(ii) *For 1966*, please compare the terms on which you sold to wholesalers and retailers of the same broad type as in (i).

If in 1966 you did not supply retailers on such a small scale please modify the instructions in (i) and (ii) above by using for both years retailers who bought the smallest quantities commonly supplied in 1966.

(c) *In completing Table A*, for goods for which you suggest a retail selling price, please state the percentages off the retail selling price allowed in each year to the purchasers described in (b), ignoring cash and settlement discounts.

(d) *In completing Table B*, for goods for which you do *not* suggest a retail selling price, please make a note of the prices for the wholesalers and retailers described in (b), for each year, ignoring cash and settlement discounts; then please enter in Table B the percentage by which the price to retailers exceeds the price to wholesalers, for each year.

N.B. References in the Tables to *1st March* are intended only to avoid any implication that figures should be averaged where they changed within that month. Any other date in March is equally acceptable.

Table A, to be used where you suggest a retail selling price.

TABLE A. PRICES OF YOUR PRODUCTS TO WHOLESALERS
AND RETAILERS

Items	Per cent off the suggested retail price for the wholesaler described in the Notes		Per cent off the suggested retail price for the retailer described in the Notes	
	1st March 1966	1st March 1969	1st March 1966	1st March 1969
For Office Use				

Table B, to be used where you do *not* suggest a retail selling price.

TABLE B. PRICES OF YOUR PRODUCTS TO RETAILERS
AND WHOLESALERS

Items	Per cent difference between the price for the retailer described in the Notes and the price for the wholesaler described in the Notes	
	As at 1st March 1966	As at 1st March 1969
For Office Use		

Changes in Terms to Retailers and Wholesalers

If the information in Tables A and B would give a misleading picture of the changes (if any) in the comparative terms on which you supply wholesalers as against those on which you supply retailers because you have made important changes in such things as the rate of cash discounts, annual bonuses, overriding discounts, delivery charges etc., please describe these here.

Sales to National Multiples

Since March 1966 have there been any significant changes in the terms at which you supply national multiple retailers as compared with those which apply to the wholesalers outside your group who buy from you at the most favourable terms?

Sales

- (a) Yes, relatively better terms to multiples ☐ Yes, relatively better terms to the wholesalers ☐ No significant change ☐

Reasons for Changes in Terms

If there have been important changes in the comparative terms on which you supply wholesalers as against those on which you supply retailers, please comment on the main reasons. In particular: (1) is the movement a continuation of a previous trend? (2) do you consider that SET has played any part in the change?

Comments

We invite you to comment (overleaf or on a separate sheet) on any points not covered in the questions above which you feel should be brought to our attention.

Please give the name, address and telephone number of the person in your firm whom we should contact if we wish to arrange an interview.

Signed..... Date.....

SELECTIVE EMPLOYMENT TAX ENQUIRY QUESTIONNAIRE TO TRADE ASSOCIATIONS

Please tick the appropriate box or boxes. (Note: Associations whose members sell a wide range of goods may like to give separate answers in relation to different departments or classes of goods.)

1. (a) Do you consider that in your trade gross percentage margins are on average higher or lower now than they were in the year prior to the introduction of SET?

Higher ☐ Lower ☐ No change ☐ Don't know ☐

- (b) Is it your view that SET has caused margins to be higher than they otherwise would have been?

Yes ☐ No ☐ Don't know ☐

We would appreciate in your general note an indication of the relative importance of other factors (such as the abolition of RPM, wage increases, etc.) in influencing margins over this period.

2. What proportion of the trade of your members is in goods for which prices are recommended by the manufacturer (including goods still price maintained)?

About% Don't know ☐

Is it the practice of your association to make representations to suppliers or their representatives with regard to recommended margins?

Yes ☐ No ☐

If 'Yes', have you made such representations in the period since June 1966?

Yes ☐ No ☐

If 'Yes', please describe in your general note the outcome of these representations.

3. Comparing the first half of 1968 with the first half of 1966, do you consider that the rate of closure of businesses (not including those sold as going concerns) has increased in your trade?

Yes ☐ No ☐ Don't know ☐

4. Do you consider that in the past two years there has been:

- (i) an increase in the extent to which your members buy direct from manufacturers rather than through wholesalers?

Yes ☐ No ☐ Don't know ☐

- (ii) an increase in the services provided by manufacturers to your members in the form of:

Packing Yes ☐ No ☐ Don't know ☐

Advertising Yes ☐ No ☐ Don't know ☐

Delivery Yes ☐ No ☐ Don't know ☐

Other (please describe)

5. Do any of your members sell in competition with traders who do not pay SET?

Yes ☐ No ☐ Don't know ☐

If 'Yes', please describe the goods concerned and the nature of the tax-exempt competition for the important cases in your general note. It would be a great help if you could give some idea as to (i) how large a share of the trade in the goods affected is done by the tax-exempt traders, and (ii) whether this competition takes the form of the tax-exempt traders charging a lower margin.

6. Has the use of the establishment principle led to some of your members obtaining refunds of SET for all or some of their employees, while others pay tax in respect of employees engaged in the same activity?

Yes ☐

No ☐

Don't know ☐

If Yes, please describe the main cases in which this happens and give some indication of their importance.

7. Is it your impression that the proportion of business in your trade going to shops manned predominantly by self-employed people has increased as a result of SET?

Yes ☐

No ☐

Don't know ☐

If Yes, can you give any indication of the importance of this increase?

8. We shall not be collecting as detailed information from smaller retailers and we should be interested to hear whether you feel that SET has affected them differently from larger companies. In particular,

(a) Is there any evidence of widespread conversion to self-employment or small partnerships to avoid SET?

Yes ☐

No ☐

(b) In the past two years, has there been a decline in the quality of service to smaller retailers from wholesalers?

Yes ☐

No ☐

(c) If there has been a decline, how far do you consider that this is due to SET?

Please discuss in your general note any other points which seem to you important.

9. It has been suggested that SET should be payable as a percentage of payroll rather than as so much per employee, so as to reduce anomalies. Do you feel that this would be an improvement?

Yes ☐

No ☐

Don't know ☐

Signed..... Date.....

Association

Person to be contacted on any matter concerning the Enquiry (with address):

.....
.....
.....
.....

APPENDIX C

TRADE ASSOCIATION DATA

This appendix summarises the figures which were made available to us by a number of retail and wholesale trade associations. We are very grateful to them for their assistance in this matter.

The information is presented in the form most closely comparable with that obtained from our own enquiries, but inevitably the definitions are not always identical. The definitions used are described in the notes to each of the tables. These notes also describe the source of the data.

I. RETAIL

TABLE C.1 *Retail Distributors Association*
(Index numbers 1961=100)

Year	1961	1962	1963	1964	1965	1966	1967	1968
Sales	100.0	104.2	111.2	117.8	124.3	126.8	133.2	143.6
<i>The items below are expressed as a percentage of sales</i>								
Gross Margin	100.0	100.7	102.3	103.0	101.3	103.3	105.3	103.3
Total Expenses	100.0	101.3	108.5	108.1	107.2	110.0	111.0	110.2
of which								
Personnel Expenses (including SET)	100.0	101.3	100.6	101.3	101.3	105.2	106.5	105.2
Trading Surplus after Rent	100.0	98.5	80.0	84.6	80.0	75.4	84.6	78.5

Notes:

(1) *Source:* These figures are compiled from returns made by department store organisations belonging to the Retail Distributors Association. The trade year runs from 1st February to 31st January, so that, for example, the 1968 figures cover February, 1968—January, 1969. The firms completing the returns vary from year to year, but in each case they provide figures for two trade years. The index figures given above were obtained by linking successive years on the basis of constant sample changes, working back from 1968. The number of firms completing returns was of the order of 160 for the years 1961–6 but fell to 120 in the last two years.

(2) *Gross Margin:* This is comparable with the figures obtained in the DAE retailer enquiry. (It includes all discounts received from suppliers.)

(3) *Total Expenses:* This differs from the item 'Total expenses (excluding rent and interest)' in the DAE retailer enquiry in that it includes an allowance for rent equal to the net annual value for rating purposes of all properties used in the operation of the business. Rents actually paid are excluded. Depreciation is included.

(4) *Personnel Expenses:* This differs from the item 'Payroll' in the DAE retailer enquiry in that it includes certain staff welfare expenditures.

(5) *Trading Surplus after Rent (and Depreciation):* This equals gross profit less total expenses. It differs from the item 'Net profit before rent and interest' in the DAE retailer enquiry in that a rent charge has been subtracted (see note (3)).

TABLE C.2

Cooperative Union

The items below are expressed as a percentage of <i>direct</i> sales		1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
Gross Margin		24.8	25.1	25.4	25.6	26.0	26.2	25.9	25.9	26.3	26.2	26.5	25.9
Total Expenses		17.7	18.4	18.7	19.1	19.8	20.4	20.6	20.5	21.0	21.5	22.4	22.1
of which: Wages		12.3	12.7	12.6	12.8	13.3	13.5	13.7	13.4	13.6	13.8	—	—
Total Personnel Expenses		—	—	—	—	—	—	—	—	—	15.0	15.6	15.3
Net Surplus (before share interest and dividend) attributable to direct sales		7.1	6.7	6.6	6.5	6.2	5.8	5.3	5.4	5.3	4.7	4.1	3.8

Notes:

- (1) *Source*: These figures are compiled from annual returns made by all retail societies to the Cooperative Union. The returns relate to each society's trading year, which may end between 1st September of the year in question and 31st January of the succeeding year.
- (2) *Direct Sales and Indirect Sales*: In certain cases, sales are made by federal societies (not included here) to the members of retail societies. In these cases, payment is made by the members direct to the federal societies, which pay a commission to the retail society. These sales are referred to as *indirect* sales, and are not covered in the figures given above. The remaining sales are referred to as *direct* sales. All items in the table are expressed as a percentage of direct sales.
- (3) *Gross Margin*: This is calculated as the sum of total expenses and net surplus attributable to direct sales (see note (6)).
- (4) *Total Expenses*: This differs from the item 'Total expenses (excluding rent and interest)' in the DAE retailer enquiry in that it includes rent and interest (apart from share interest).
- (5) *Personnel Expenses*: The figure for total personnel expenses is only available from 1966. It corresponds to the item 'Payroll' in the DAE retailer enquiry and includes SET. The item 'wages' given for earlier years excludes National Insurance contributions, and graduated pension and superannuation fund contributions.
- (6) *Net Surplus*: This item has been calculated on the assumption that the commission paid on indirect sales is on average equal to the net surplus on direct sales. The net surplus attributable to direct sales is then equal to the total net surplus (before share interest and dividend) minus the commission on indirect sales.

TABLE C.3

The Booksellers Association

Year	1964	1965	1966	1967	1968
Number of Firms	139	171	230	250	234
Sales (£ million)	11.1	13.7	20.4	26.2	27.8
<i>The items below are expressed as a percentage of sales</i>					
Gross Margin	24.9	24.9	25.6	25.7	26.2
Total Expenses	20.9	21.0	21.2	21.4	22.4
of which:					
Payroll	12.8	12.8	13.0	13.3	13.6
Trading Profit	4.0	3.9	4.4	4.3	3.8
Trading Profit as a percentage of Capital Employed	14.1	15.1	17.3	13.8	12.5

Notes:

(1) These figures are compiled from the returns made by members of the Charter Group of the Association. The firms only provide figures for one trade year, so that it is not possible to derive linked figures based on constant sample changes.

(2) *Gross Margin*: This is comparable with the figures obtained in the DAE retailer enquiry.

(3) *Total Expenses*: This differs from the item 'Total expenses (excluding rent and interest)' in the DAE retailer enquiry in that it includes rent. (In the case of businesses operated from a freehold property on which no rent is directly charged to the accounts, an amount equal to the rateable value is put in as a nominal rent figure.)

(4) *Payroll*: This item includes all wages and salaries (including those of working proprietors) and National Insurance contributions.

(5) *Trading Profit*: This equals gross profit less total expenses. It differs from the item 'Net profit before rent and interest' in the DAE retailer enquiry in that rent has been subtracted.

TABLE C.4

National Federation of Wholesale Grocers

Year	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
No. of firms	159	153	134	108	78	56	56	70	54	68	65	67	67
Average sales per firm (£'000)	1752	1838	1943	2047	2168	2304	2153	2272	1407	1808	2086	2175	2335
<i>The items below are expressed as a percentage of sales</i>													
Gross Margin	6.51	6.87	6.99	7.38	6.93	6.68	6.90	7.03	7.20	7.49	7.17	6.70	6.51
Total Expenses (including rent and interest)	5.00	5.32	5.50	5.87	5.78	5.67	5.94	5.90	6.29	6.06	5.91	5.64	5.46
Net Profit (after rent and interest)	1.51	1.55	1.49	1.51	1.15	1.01	0.96	1.13	0.91	1.43	1.26	1.06	1.05
Index of Productivity (1965=100)	72.0	69.2	72.3	69.8	78.4	78.3	75.8	81.6	79.2	85.6	87.8	100.0	120.7

Notes:

(1) *Source:* The figures are compiled from returns made by members of the National Federation of Wholesale Grocers and Provision Merchants. The figures for 1954 to 1959 are a linked series with the change between each pair of years being based on a constant sample of firms. The figures for 1960 and subsequent years are not based on a constant sample.

(2) *Index of Productivity:* This index is based on the value of turnover per employee (no allowance is made for part-time workers) and adjusted for price increases in the same way as in the DAE enquiry.

TABLE C.5

The Textile Distributors Association

(Year to year changes in margins and costs as a percentage of sales)

Year	1963	1964	1965	1966	1967	1968
Number of firms	98	103	100	108	105	104
Gross Margin	0.10	0.27	0.47	0.30	0.77	0.68
Expenses (including rent)	0.18	0.01	0.58	0.99	0.76	-0.05
SET	—	—	—	0.18	0.26	0.07
Payroll (excluding SET)	0.01	-0.07	0.32	0.18	0.20	0.04
Other Expenses	0.17	0.08	0.26	0.63	0.30	-0.15
Net Profit (before interest)	-0.08	0.26	-0.11	-0.68	0.01	0.71
Index of Productivity (1962=100)	103.5	110.1	113.5	114.9	115.9	123.2

Notes:

(1) *Source:* Returns by members of the Textile Distributors Association. The figures are not based on a constant sample.

TABLE C.6

Federation of Hardware Factors

The items below are expressed as a percentage of sales		1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967
Gross Margins		17.4	17.0	17.1	17.3	17.4	17.8	17.5	17.8	17.8	17.5	17.6	17.2	18.0	18.3
Expenses (excluding interest)		14.1	14.1	14.1	14.3	14.5	15.5	15.2	15.5	16.1	16.0	15.2	15.4	16.0	16.4
of which:															
Payroll (including Directors fees)		8.8	9.1	9.2	9.2	9.4	10.1	9.7	9.9	10.1	9.6	9.4	9.7	10.3	10.6
Other Expenses		5.3	5.0	4.9	5.1	5.1	5.4	5.5	5.6	6.0	6.4	5.8	5.7	5.6	5.8
Net Profit (before interest)		3.3	2.9	3.0	3.0	2.9	2.3	2.3	2.3	1.7	1.5	2.4	1.8	2.0	1.9
Index of Productivity (1965=100)		86.5	85.4	85.2	85.1	85.9	83.6	90.1	88.8	87.2	94.2	100.2	100.0	100.1	102.1

Notes:

(1) *Source:* Returns made by members to the Federation of Hardware Factors. The figures are not based on a constant sample. The average number of firms included is about twenty.

(2) *Index of Productivity:* Based on payroll as a percentage of sales deflated by increase in labour costs and allowing for price increases (the method used was the same as that in the DAE enquiry).

TABLE C.7

*Agricultural Machinery and Tractor Dealers
Association*

The figures below are expressed as a percentage of sales				Percentage change
	1965	1966	1967	1965 to 1967
Crude Gross Margin	17.77	16.46	17.53	-1.35
Other Trading Income	0.16	0.23	0.28	75.00
Total Expenses (excluding rent and interest) of which:	13.95	13.79	14.01	0.43
Payroll (including SET)	8.33	7.78	8.57	2.88
Net Margin	3.98	2.90	3.80	-4.52
Index of Productivity (1965=100)	100.0	112.0	110.9	10.9

Notes:

(1) The figures for each year relate to firms with financial years ending within that calendar year. Over 50 per cent of the returns for each year have financial years ending between September and December. The firms completing the returns vary from year to year.

(2) *Crude Gross Margin*: This includes repairs, and sales of used equipment. It excludes discounts received from suppliers and allowed to customers, and is hence not directly comparable with the DAE enquiry figures.

(3) *Total Expenses*: This excludes both rent and interest, and is directly comparable with the DAE enquiry data.

(4) *Net Margin*: This is before the deduction of rent, interest and directors' fees and is comparable with the DAE enquiry figures.

(5) *Productivity*: This is based on sales deflated by price changes and payroll adjusted for increases in earnings. An estimate has been made for the percentage of payroll accounted for by SET. The index is based on the same method as the DAE index derived from its own enquiry into this trade, and the same price and wage indices have been used.

LABOUR STATISTICS FOR DISTRIBUTION

The most striking feature of the distributive trades is their very heterogeneous nature—both in relation to the types of business, which range from barrow boys to large multiple retailers, and to the type of labour employed. The nature and extent of the problems involved on the labour side will emerge in detail in the examination of the available data and in the attempt to derive from the data a best estimate of changes in the number of persons engaged from 1954 to 1968, adjusted to a 'full-time-equivalent' basis. At this point, however, it is convenient to make a number of general observations on the procedure which has been followed in deriving the basic series.

First it is necessary to define the scope of the analysis. Here, a consideration of paramount importance is clearly the need to ensure as far as possible that the coverage of the employment¹ and output data is the same. For retailing we therefore aim at standardising our figures on a basis corresponding with the retail organisations covered by the Census of Distribution for 1966. This means that mail-order firms are included, as are the head offices and central warehouses of the multiple retailers. The coverage does not include, however, gas and electricity showrooms, market traders and barrow boys.

Secondly, the most detailed breakdown of the employment figures is contained in the Censuses of Distribution 1957, 1961 and 1966, and the Censuses of Population 1961 and 1966. For reasons of ensuring the same coverage for output and employment, the Censuses of Distribution have to be taken as providing the best estimate of employment in Census years. The Census of Population figures are also examined, however, to extract additional guidance about movements in employment.

Thirdly, for the non-census years estimates of employment have to be arrived at by using information of a kind which is available on a year to year basis. This consists mainly of statistics published by the Department of Employment and Productivity (DEP) and they are used as the basis of estimating the year to year movements of the figures as given by the Census of Distribution.

Fourthly, the Selective Employment Tax itself gave rise to some additional problems in interpreting the data. Thus SET was introduced at the beginning of September, 1966, which was *after* the Census of Population (April) and the date on which the relevant National Insurance cards were due to be exchanged (June) but *before* the week for which the Census of Distribution asked firms to record their labour figures (late October). This was likely to inflate the proportion of self-employed workers shown by the Census of Distribution compared with what it was before SET, since the tax offered an inducement for people to switch to a self-employed status.

Finally, for the retail trades, the estimates of employment for 1967 and 1968 have been dealt with separately from those up to 1966, because of the availability from 1966 onwards of more detailed information in the form of the 'Selling Staff Earnings and Hours Enquiries', and the Occupational Surveys in Retail Distribution.

¹ Throughout this appendix 'employment' is to be taken as covering 'self-employment' as well as 'employees', unless the context implies otherwise.

The following sections describe in detail, first for the retail trades and then for wholesalers, the methods used to derive the estimated number of persons engaged in each of the major categories of employment.

RETAIL TRADES

A. Self-Employment

Table D.1 shows the number of self-employed in 1961 and 1966 according to the Censuses of Distribution and Population. The higher estimates of the Censuses of Distribution are almost certainly due in the main to the fact that they include family helpers and unpaid workers (whether or not they have another job as well), whereas the Censuses of Population do not.

TABLE D.1 *Number of Self-Employed Workers:
Retail Trades 1961 and 1966*
(All figures are in thousands)

	1961	1966	Change 1961 to 1966
<i>Census of Distribution¹</i>			
Male	284	276	- 7
Female	245	224	-21
Total	529	501	-28
<i>Census of Population</i>			
Male	305	247	-58
Female	156	146	-10
Total	461	393	-68

¹ The Census of Distribution figures include the (published) estimate of the numbers in businesses from which returns were not secured, and the 1961 figures have been adjusted to be comparable with 1966 by excluding market traders.

This seems to be confirmed by the fact that in each year the differences between the two Censuses are found mainly in relation to female self-employed workers, who almost certainly account for the bulk of the family helpers and unpaid workers. Against this, the Census of Distribution does not cover market traders, street-sellers of newspapers etc., who are largely male.

As far as *changes* in the number of self-employed workers is concerned, both sources show a fall in numbers from 1961 to 1966, but the decline is much greater according to the Census of Population estimates. There is no direct evidence available on the reasons for this discrepancy, but the switch from employee status to self-employment as a result of SET is likely to be a major part of the explanation. It is probable that the fall in the number of market traders etc. not covered by the Census of Distribution was steeper than for other categories, but the numbers involved are too small for this to account for very much of the discrepancy.

The Census of Distribution estimates for 1957, 1961 and 1966 are shown in the first three rows of Table D.2. Row 4 in this table shows the estimated number of self-employed according to the third main source of information—which relies on the June-August exchange of cards.¹ This series inevitably falls far short of the total numbers of self-employed, largely because a high proportion, mainly married women, have little incentive to pay National Insurance contributions and many do not have a card. In addition the figures make no allowance for the late exchange of cards outside the B quarter, and do not cover those family helpers who have no card, or whose *main* activity is in another job. It is, however, the only series available on which to base estimates of movements in the numbers of self-employed outside of Census years, and for that purpose it is much better than nothing: we are grateful to the DEP for making available to us a series which they do not publish because it is not comprehensive.

One adjustment has to be made, however, to these figures for self-employed. The figures up to and including 1958 are based on the 1948 Standard Industrial Classification (SIC) whereas those for 1959 and subsequent years are based on the 1958 SIC. For employees the number in 1959 is available for both classifications, but for self-employed there is no such direct link between the two series. To produce a comparable series on the 1958 classification, therefore, we raised all the pre-1959 figures by 9.4 per cent, which was the adjustment found for the employees.²

The next step is to use the annual series based on exchange of cards to interpolate the Census figures. The most direct method—which we used between 1957 and 1961—is to calculate the ratio of the Census figure to the card exchange figure for 1957 and 1961, and to interpolate ratios for the intervening years; as the ratios were very similar in the two Census years, this is a reasonably satisfactory procedure, and the results are shown in the bottom two rows of Table D.2.

Between 1961 and 1966, however, this method would be unsatisfactory, because the 1966 Census figures reflect the impact of SET, and in consequence the ratio calculated for 1966 (2.29) would be considerably higher than the ratio in 1961 (2.10). If we interpolated ratios linearly between these two figures, and used them to blow up the card exchange series for each year, we would be greatly reducing the steepness of the fall shown by the latter all through the period: this would be contrary to the evidence provided by the Census of Population, which showed a similar reduction between 1961 and 1966 to that shown by the card exchange (15 per cent against 13 per cent).

Consequently, we decided to extrapolate the previous series of conversion factors derived from the 1957 and 1961 Censuses both forwards and backwards (which is almost the same as using a constant ratio) and apply these to the card exchange series to derive a 'census' figure for each year, including 1966—

¹ The work of renewing these cards is spread over the year by staggering their exchange according to their suffix. Cards with suffix A are due for exchange in the first week in March, those with suffix B in the first week in June, and suffix C and D in the first week in September and December respectively. It is the B-cards which are analysed in detail and form the basis of the employment estimates. Although these cards are *due* for exchange in the first week in June, many of them come in late, and the ones which are analysed are the ones exchanged in the three months June, July and August. The self-employed are identified by the *latest* stamp or credit on the card being of Class 2.

² Fortunately the adjusted series then shows very much the same movement between 1957 and 1961 as the Census of Distribution.

TABLE D.2

Self-Employment: Retail Trades 1954 to 1966

(thousands)

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Census of Distribution (1966 Basis)													
Full-time	(1)			426				428					408
Part-time	(2)			117				101					93
Total	(3)			543				529					501
Exchange of Cards 1948 Classn. 1958 Classn.	(4) 242 (5) (265)	246 (269)	238 (260)	237 (259)	228 (249)	261	260	251	245	247	238	223	219
Ratio, Census to Cards 1958 Classn.	(6) 2.09	2.09	2.09	2.10	2.10	2.10	2.10	2.11	2.11	2.11	2.12	2.12	2.12
Estimates on Census Basis	(7) 553	562	544	543	523	549	547	529	517	522	504	473	465*

* Estimate of Pre-SET position.

the 1966 figure being, of course, the estimated number of self-employed before the introduction of SET, rather than in the week used by the Census.¹

1967 and 1968

The increased number of self-employed during 1966 could not be expected to produce an equal increase in the exchange of cards in 1967, partly because the latter is always defective (as explained above) and partly because some of the people who changed their status would be likely to refrain from maintaining their insurance card (whether legally or illegally). In preparing our estimate for 1967, therefore, we have to add a special adjustment for such of these people as are not automatically allowed for by our use of the conversion factors extrapolated from the earlier series.

Our estimate of this number can only be a very rough one, and makes implicit assumptions about evasion which can only be tested (if at all) by a comprehensive check of the country's figures for labour usage against those for labour availability. Work has been started on this, and the results may be available for our Final Report, but it is not possible to incorporate them now.

Our interim method was as follows. The estimate in Table D.2 for 1966 is 36,000 below the Census figure for self-employed, and we take this as measuring the SET switch from employees to self-employed. The figures for exchange of cards were falling between 1961 and 1966 by some 6,000 a year, but rose between 1966 and 1967 by 3,000. We assume therefore that 9,000 extra cards got into the 1967 card exchange figure because of the SET switch; as our conversion factor is rather over 2, a further 10,000 is automatically added to our estimate on the census basis (which may be thought of as an allowance for self-employed who do not get included in the card exchange series for one reason or another, based on previous experience). The remaining 17,000 are therefore treated as a special addition, to be made both in 1967 and 1968.

TABLE D.3 *Self-Employment: Retail Trades, 1966 to 1968*
(thousands)

	1966 (Pre-SET)	1967	1968
Card Exchange Series	219	222	217
Conversion Factor	2.12	2.13	2.13
Census Basis, first estimate	465	472	462
Adjustment for SET effects not included above ¹	0	17	17
Census Basis, adjusted	465	489	479

¹ The reason for this item is given in the text.

In consequence, we get the position shown in Table D.3. The final figures must be considered against the background of the fall between 1961 and 1966 of 64,000 shown in table D.2, caused by the progressive reduction in the number

¹ As is explained below, the procedure implies a reciprocal adjustment to the figures for employees.

of shops run by individual proprietors or partnerships: SET has raised the number of self-employed, but it has been working against a strong downward trend.¹

Full-Time-Equivalents

The final calculation is to convert the series of the total number of self-employed, into a 'full-time-equivalent' series. The proportion of self-employed who are part-time workers is shown in the Censuses of Distribution. The proportion shows little change and the figures for non-census years have been derived by straight interpolation and extrapolation, subject to the qualification that in 1967 and 1968 all the 17,000 in the adjustment item are assumed to be full-timers. This allows a division to be made between full-time and part-time self-employed.

In deriving the series of full-time equivalents it is assumed that a part-time worker is equivalent to one-third of a full-time worker. This may well be an over-estimate of the average proportion of the normal hours worked by part-timers, but they often work at busy times, and it seemed better to avoid under-estimating the role of the part-timers, whether self-employed or employees. The effect of taking rather lower factors for the various classes of part-timers would be very small, so far as concerns the *movement* in the FTE grand total for employees and self-employed together.

The figures for self-employment for the whole period are summarised in Table D.4.

EMPLOYEES IN RETAILING

As in the case of the self-employed, the Censuses of Distribution are again taken as the basic benchmarks, but the 1966 figures have to be adjusted before they can be combined with the DEP series for calculating the figures for non-census years, since the census figures relate to October, whilst the DEP series relate to June. For other years it seems reasonable to use the June-to-June movements as a means of estimating the change between one October and the next (although we had hoped to use estimates from the DEP of annual averages). But in the year in which SET started there was clearly an abnormal movement in the employment, and a special adjustment was needed on the lines set out in the next paragraph.

The DEP mid-year card count shows a fall of 102,000 from June 1966 to June 1967. Of this, 36,000 is accounted for by the 'SET switch' to self-employment mentioned in the preceding section, and we compensated for reducing the number taken as self-employed by a corresponding addition to the number of employees. In addition, we assumed that one-third of the remaining reduction of 66,000 had occurred by October, so that a total addition of 58,000 was made to the 1966 Census figures before they were linked with the DEP series.

The position is summarized in Table D.5, which also reveals the statistical awkwardness which springs from the absence in the Census Reports of a separate analysis of the employees engaged in General Mail-Order Houses and the central offices and warehouses run by multiple retailers.

¹ It is also relevant to note that we tried an alternative method, based on a sample of insurance cards taken by the Department of Health and Social Security in 1966, 1967 and 1968, which uses cards exchanged within nine months of the due date instead of three: this therefore starts from a higher figure than the ones which we have been using, and our conversion factors were in consequence lower. The result was almost identical for 1967, but lower for 1968, when the basic series showed a fall of 19,000 for cards exchanged.

TABLE D.4

Self-Employed, Full-Time-Equivalent: Retail Trades, 1954 to 1968

	(thousands)														
Year	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
Estimated number of self-employed	553	562	544	543	523	549	547	529	517	522	504	473	465	489	479
Proportion of part-time workers	21.7	21.6	21.5	21.5	20.9	20.3	19.7	19.1	19.0	18.9	18.8	18.6	18.5	18.4*	18.3*
Number of part-time workers	120	121	117	117	109	111	108	101	98	99	95	88	86	87	84
Number of full-time workers	433	441	427	426	414	438	439	428	419	423	409	385	379	402	395
Total (full-time-equivalent: 3 part-timers = 1 full-time worker)	473	481	466	465	450	475	475	462	452	456	441	414	408	431	423

* These percentages are applied to the totals *before* the addition of 17,000 made in Table D.3, who are assumed to be full-timers.

* These percentages are applied to the totals *before* the addition of 17,000 made in Table D.3, who are assumed to be full-timers.

The main method of arriving at figures for non-census years is, as indicated above, to use the DEP figures based on the exchange of insurance cards, but these have to be supplemented with other sources of information to deal with the varying categories of part-timers, to which we turn first.

TABLE D.5 *Number of Employees: Retail Trades, 1957, 1961 and 1966*
(thousands)

Year	1957	1961	1966
1. Excluding General Mail-Order Houses etc. ¹			
<i>Female</i>			
Full-time	794	770	727
Part-time	358	427	560
<i>Male</i>			
Full-time	615	633	586
Part-time	162	123	182
2. General Mail-Order Houses etc. ¹	170	212	238
3. Total shown in Census	2099	2165	2293
4. Adjustments to 1966 figure ²			
(a) SET switch to self-employment			36
(b) Additional fall in number of employees, June-October, 1966			22
5. 1966 Total, used for linking with DEP series			2350

¹ The Census tables analysing employment in retail *establishments* do not include General Mail-Order Houses and central offices and warehouses run by multiple retailers. (The organisation tables include them but do not analyse them separately in detail except for General Mail-Order Houses; in 1966, these had 45,665 employees, 15,150 of them part-time.)

² The reasons for these adjustments are explained in the text.

Part-time Employees, 1954 to 1966

(1) Females

The DEP have conducted an annual series of sample surveys, known as the L5 returns, which asked the firms to report the proportion of their female employees who were working on a part-time basis, excluding those working only on Saturdays. In Table D.6 this percentage has been applied to the number of female employees who exchanged cards for each year to arrive, in row 3, at an estimate for the number of part-time employees, excluding those working on Saturday only.

Row 4 in the table gives the Census figures for part-time female employees, which should be comprehensive, so that the difference between these figures and those in row 3 is taken as an estimate of the number of Saturday-only employees in the Census years.¹

¹ The figures for the number of Saturday-only employees arrived at in this way are, of course, only an approximation to the true figures. Whereas the difference between the Census and DEP figures is largely attributable to Saturday-only workers there are other differences of definition and coverage which account for part of the discrepancy. First the L5 returns exclude double-jobbers whose work in retail distribution is a secondary part-time occupation. Secondly, the Census figures are obtained in October when work amongst part-year workers is more prevalent than in July, the date to which the L5 returns relate.

The number found in this way rises at about the same (absolute) pace between 1957 and 1961 as between 1961 and 1966. The numbers for other years are therefore inserted by straight linear interpolation and extrapolation.

(2) *Males*

For males there is no series equivalent to the L5 returns, and the Census figures follow a somewhat strange path. Fortunately, however, the number of male part-time employees is relatively small, and it appears that a high proportion of them work only on Saturdays, so that they have relatively little influence on the full-time-equivalent total for people working in the distributive trades. Our necessarily unsatisfactory procedure is explained below, and the results are given in Table D.7.

The total Census figures have been divided between 'Saturday-only' and 'other' on the basis of 62 per cent for the former category, which is the proportion shown by the Occupational Survey for 1966. For the inter-censal years the changes in the number of both types are assumed to be spread evenly over the period, and the figures for the years 1954 to 1956 are assumed to be the same as those for 1957.

(3) *All Part-time Employees*

The estimates described above are brought together in Table D.8, and a total is given both for the number of people and in terms of full-time-equivalents. The latter series is derived by counting Saturday-only employees as equivalent to one-fifth of a full-time employee, and other part-timers as equivalent to one-half. These proportions are probably a bit on the high side, if one is wanting to estimate the average proportion of the week worked by the part-timers, but as with the self-employed we thought it best to avoid the risk of underestimating the importance of part-timers, because they work at peak periods.

(4) *Full-time Employees, 1954 to 1966*

The method for full-time employees is to take the figures based on the Census, and to estimate the figures for the inter-censal years by reference to the movements in the number of cards exchanged, *less* the number of cards which are considered to have related to the part-timers whom we have already considered. The first job is, therefore, to estimate the number to be subtracted on that account.

Theoretically, all part-time employees should have a National Insurance card, including even the Saturday-only employees, because they are all required to be covered for industrial injury. There is known, however, to be a certain amount of evasion, and in addition a proportion of the part-timers who do have cards will be 'double-jobbers', whose cards will be counted against their main activity, rather than under retailing. Somewhat arbitrarily, we have assumed that the proportion of the various categories who would be included in the DEP figures are as shown in Table D.9. In this way, we arrive at an estimate of the number of full-time employees included in the DEP series, which is shown in row 3 of the same table.

Fortunately, the estimates for DEP full-timers arrived at in this way show a fairly similar movement between the Census years to that given by the census figures, which are included in row 4. We then calculated conversion factors from DEP to Census for the Census years, as shown in row 5, and filled in the figures for other years by linear interpolation and extrapolation. This enabled us to arrive at a complete series of full-time employees in row 6.

TABLE D.6

Number of Female Part-time Employees: Retail Trades, 1954 to 1966

(thousands)

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
1. Employees in Employment (card exchange)	1015	1054	1091	1131	1121	1146	1192	1221	1255	1270	1286	1309	1340
2. Percentage of part-time employees (L5 sample)	17.3	17.3	17.3	17.2	17.4	17.7	19.3	21.2†	23.1†	25.1	25.3	27.2	29.4
3. Part-time employees, number	176	182	189	195	195	203	230	259	290	319	325	356	394
4. Census figure for part-time employees*	—	—	—	385	—	—	—	466	—	—	—	—	624
5. Saturday-only employees	178	182	186	190	194	198	202	207	212	216	221	225	230

* For 1966 the figure is obtained by adding to the figure of 560,000 shown in Table D.5 a figure of 9,000 to represent part of the adjustment item shown in that Table, and 55,000, as an estimate of the number of part-time female employees working in General Mail-Order Houses etc. this latter figure is based on limited information obtained from the Census Office and the results of the New Earnings Survey of 1968. For the other two years, it is assumed that part-time working increased at much the same rate relatively to full-time as for the rest of the retail sector.

† The samples used for L5 returns were revised in 1963, and the figures used for 1961 and 1962 have been adjusted to give better continuity.

TABLE D.7

Number of Male Part-time Employees: Retail Trades, 1954 to 1966
(thousands)

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
1. Census figure for part-time employees*	—	—	—	162	—	—	—	123	—	—	—	—	191
2. Saturday-only	100	100	100	100	94	88	82	76	84	93	101	110	118
3. 'Other' part-time	62	62	62	62	58	54	50	47	52	57	62	67	73

* It is assumed that the number of male part-timers in General Mail-Order Houses etc. can be ignored; the 1966 figure has been raised by 9,000 out of the adjustment items shown in Table D.5.

TABLE D.8
Number of Part-time Employees: Retail Trades, 1954 to 1966
(thousands)

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Saturday-only	278	282	286	290	288	286	284	283	296	309	322	335	348
Other part-time	238	244	251	257	253	257	280	306	342	376	387	423	467
Total	516	526	537	547	541	543	564	589	638	685	709	758	815
Total (FTE)*	175	178	183	187	185	186	197	210	230	250	258	279	304

* Counting 'Saturday-only' as one-fifth, 'other' as one-half.

Employees in Retailing, 1967 and 1968

For the years 1967 and 1968 it is possible to make better estimates of the movement, compared with the base in 1966, in the various types of part-time workers, because a new source of data appeared in the Occupation Survey. This is a sample survey conducted by the DEP, in which employers were asked to report the proportions of their employees who were working part-time (divided between Saturday-only and other), both for males and for females.

By applying these percentages to the numbers of cards exchanged for each sex in each year, it is possible to produce some indicators of the numbers working part-time in each category: these are not reliable as absolute figures, owing to the nature of the sample, but they should give a reasonable guide to the movement from year to year, which can be applied to the 1966 base.

The results of this process are shown in Table D.10, and Table D.11 then applies the same method as was used before (in Table D.9) to produce a series for full-timers.

TOTAL PERSONS ENGAGED (FTE), 1954 TO 1968

Finally, Table D.12 brings together the results of all the calculations in respect of retailing, by showing comprehensive figures for the numbers of self-employed, full-time employees and part-time employees, all expressed in terms of full-time-equivalents.

The final row requires some explanation. The figures which have been described so far were based fundamentally on the Census of Distribution, and therefore reflect the October level of employment so far as the seasonal pattern is concerned. At the time when we were making the calculations, the only series available for year-to-year movements was the DEP series based on the position in June. As our concern was essentially to be able to make comparisons between the different years, we prepared what was essentially a set of figures which would compare the positions in June: for 1957 and 1961 we effectively assumed that the movement between June and October had nothing special about it, but for 1966 we made the special allowances described above.

After the detailed calculations had been finished—and when it was too late to adopt any other basic procedure—we received from the DEP a series showing the estimated annual average for employees in employment for each calendar year, as well as the June figure. Clearly, it is much more appropriate to have a series which reflects the average position over the whole year when one is making a comparison between any two years, rather than relying simply on a comparison between the two figures for June. Consequently, we took the figures at which we had arrived (shown in the penultimate row of Table D.12) and adjusted them for the ratio between the *annual average* of employees for that year and the *June figure*. In order to avoid changing the general scale of the figures, however, we made the average correction factor for the period 1954 to 1965 equal to unity; this enables one to see directly what effect the adjustment had, and in fact it is always small. We are grateful to the DEP for the special work needed to supply us with these estimates of the annual average.

WHOLESALE TRADES

There is much less information available for wholesale trades than for the retail sector. Fortunately, however, self-employment and part-time working are much less important than in retail trades, so that the calculation of total persons engaged can be a more straightforward exercise.

TABLE D.9
Number of Employees in Employment: Retail Trades, 1954 to 1966

	(thousands)												
	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
1. DEP employees in employment	1727	1773	1816	1870	1866	1907	1974	1997	2038	2059	2074	2082	2105
2. Part-time employees included in DEP series													
(a) $\frac{1}{2}$ Male Saturday-only	25	25	25	25	24	22	21	19	21	23	25	28	30
(b) $\frac{1}{2}$ Female Saturday-only	89	91	93	95	97	99	101	104	106	108	111	113	115
(c) 90 per cent other	214	220	226	231	228	231	252	275	308	338	348	381	420
(d) Total part-timers to be deducted	328	336	344	351	349	352	374	398	435	469	484	522	565
3. Derived DEP full-time employees	1399	1437	1472	1519	1517	1555	1600	1599	1603	1590	1590	1560	1540
4. Census full-time employees*				1552				1576					1535
5. Ratio Census to DEP	1.05	1.04	1.03	1.02	1.01	1.00	.995	.99	.99	.99	.99	.995	1.00
6. Full-time employees	1468	1494	1518	1552	1537	1561	1592	1576	1584	1574	1577	1552	1535

* Includes the employees in General Mail-Order Houses etc. not treated as part-timers; the 1966 figure also includes 40,000 out of the adjustment item shown in Table D.5.

TABLE D.10 *Number of Part-time Employees: Retail Trades, 1966 to 1968*
(thousands)

	1966		1967		1968	
	M	F	M	F	M	F
Employees in employment (card exchange)	765	1340	721	1282	701	1276
Percentage of part-time employees (Occupational Survey)						
Saturday-only	7.1	11.9	7.3	12.3	8.3	13.2
Other	4.3	25.1	4.2	23.8	4.9	25.3
Number of part-time employees (Occupational Survey basis)						
Saturday-only	54	159	53	158	58	168
Other	33	336	30	305	34	323
Numbers on Census basis*						
Saturday-only	118	230	116	229	127	243
Other	73	394	66	358	75	379

* The 1966 figures are adjusted to be in line with the DEP series, as explained under earlier tables.

TABLE D.11 *Full-time Employees: Retail Trades, 1966 to 1968*
(thousands)

	1966	1967	1968
1. Employees in employment (Card Exchange)	2105	2003	1977
2. Part-time employees included in above ¹	565	525	563
3. Derived DEP series for full-timers	1540	1478	1414
4. Full-timers on Census basis	1535	1473	1409

¹ Taken as $\frac{1}{4}$ of Saturday-only males, plus $\frac{1}{2}$ of Saturday-only females, plus 90 per cent of 'others'.

TABLE D.12 *Total Persons Engaged (Full-time-equivalent): Retail Trades, 1954 to 1968*
(thousands)

Year	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966*	1967	1968
Self-employed Employees	473	481	466	465	450	475	475	462	452	456	441	414	408	431	423
Full-time	1468	1494	1518	1552	1537	1561	1592	1576	1584	1574	1579	1552	1535	1473	1409
Part-time	175	178	183	187	185	186	197	210	230	250	258	279	304	281	301
Total persons engaged	2116	2153	2167	2204	2172	2222	2264	2248	2266	2280	2278	2245	2247	2185	2133
Adjusted total persons engaged†	2110	2157	2171	2191	2174	2226	2262	2255	2257	2278	2278	2258	2234	2192	2139

* The first four rows are the adjusted figures, derived from earlier tables.

† These figures give the movement on the basis of the *annual average* for the year, as explained on page 282.

TABLE D.13

Employees in Employment: Wholesale Trades, 1954 to 1968
(thousands)

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
<i>Self-employed</i>															
1. Exchange of cards	26	27	26	26	25	24	25	24	24	26	25	25	25	27	25
<i>Employees</i>															
A. <i>Females</i>															
2. Employees in exchange employment, card	154	159	164	170	169	178	184	183	191	193	191	198	197	195	196
3. Percentage of part-time employees, L5 sample	12.0	12.0	12.0	9.8	9.1	10.7	12.0*	13.3*	14.5*	15.8	15.7	16.6	18.0	17.7	18.4
4. Part-time employees, number	18	19	20	17	15	19	22	24	28	30	30	33	35	35	36
5. Full-time employees	136	140	144	153	154	159	162	159	163	163	161	165	162	160	160
B. <i>Males</i>															
6. Employees in exchange employment, card	293	300	308	323	319	325	324	325	340	347	347	349	344	330	335

* The samples used for L5 returns were revised in 1963 and the figures used for 1960, 1961 and 1962 have been adjusted to give better continuity.

In view of the fact that there is no detailed information on employment comparable to that contained for retailing in the Censuses of Distribution, we have relied entirely on DEP data. These data are shown in Table 13.

The first row shows the estimated number of self-employed, which has changed very little over the period. The remainder of the table relates to employees in employment.

For females row 2 shows the total number of employees in employment, and the proportion of part-time employees according to the L5 returns is applied to these figures to arrive, in row 4, at an estimate of the number of part-time employees working eight to thirty hours a week. This is almost certainly an underestimate of the number of part-time employees: according to the New Earnings Survey of 1968 for instance 22.7 per cent of female employees normally worked 30 hours a week or less as compared to 18.4 per cent shown in Table D.14. However, an allowance for this kind of discrepancy would have a very small effect indeed on the estimated number of persons engaged on a full-time-equivalent basis and it has therefore been ignored.

For males, the mid-year card exchange gives the total number of employees in employment, but there is no series equivalent to the L5 returns. However the number of male part-time employees is very small: according to the New Earnings Survey the proportion of part-timers in 1968 was 2.4 per cent. An adjustment for part-time working would, therefore, have little effect on the employment figures, and for simplicity we have assumed that all male employees work full-time.

Finally in Table D.14 the results of the calculations in the previous table are brought together and expressed in terms of full-time-equivalents, and then adjusted to an annual-average basis in the same way as was explained above for retailing.

TABLE D.14 *Total Persons Engaged (Full-time-equivalent): Wholesale Trades, 1954 to 1968*
(thousands)

<i>Self-employed Employees</i>	26	27	26	26	25	24	25	24	24	26	25	25	25	27	25
Full-time	429	440	452	476	473	484	486	484	503	510	508	514	506	490	495
Part-time	9	10	10	9	8	10	11	12	14	15	15	17	18	18	18
Total persons engaged	464	477	488	511	506	518	522	520	541	551	548	556	549	535	538
Adjusted total persons engaged	464	478	490	510	509	517	520	521	539	550	550	555	548	537	533

APPENDIX E

NOTES ON THE PREPARATION OF STATISTICS USED IN THE TEXT

The following notes provide a more detailed description of the methods used in preparing the tables presented in the text. They are additional to the general description of methods (Appendix B) and to the separate appendices on labour statistics (Appendix D), and on disentangling the effect of SET (Appendix F).

The notes follow the sequence of the text (apart from the General Note on adjusting sales, which applies to all the information obtained from the DAE enquiries).

General Note on Adjustment of Sales

In preparing the results of the DAE enquiry two adjustments were made to recorded sales. The most important of these concerned wholesalers of perishable foods, which differed from the traditional wholesale trades because of the importance of sales on commission in addition to sales on own account (or by outright purchase). On the Revenue and Expenditure Table we asked for sales on own account and income from sales on commission. We estimated sales on commission, in order to obtain total sales, by assuming a commission rate of 8.5 per cent to hold on average for all firms over the whole period. The choice of this percentage rate was determined by reference to 'Distribution Costs of Fresh Fruit and Vegetables' Report No. 31, National Board for Prices and Incomes, and The National Federation of Fruit and Potato Trades: 'Memorandum on Replies Received from Members to Questionnaires sent out by the NBPI', presented by Peat, Marwick, Mitchell and Co. for the Federation. (In the questionnaire sent by the DAE, all those firms replying to the question on commissions stated that they had not changed the percentage rate over the period 1965-6 to 1967-8.) Total sales estimated in this way were then used to calculate gross margins, net margins, payroll etc. as a percentage of sales.

A much more minor adjustment was also made to those firms in the large retailer enquiry which recorded sales on wholesale terms. Where these sales represented more than 5 per cent of total turnover (which was only the case with five firms) sales were adjusted to allow for this.

Special Notes on Individual Tables¹

Chapter VI

Table VI.2 The Census movements are derived from figures supplied by the Board of Trade where 1957 and 1961 have been adjusted to be comparable with 1966.

Table VI.4 The Census figures are taken directly from the published sources and relate to wholesalers with stocks. In combining the figures for individual trades, sales in 1965 (according to the Census) were used as weights. The 'other goods' category consists of pharmaceuticals, stationery and books.

Chapter VII

Table VII.3 The Census comparisons are based on data on wages and salaries as a percentage of turnover supplied by the Board of Trade.

¹ For weighting principles see page B.9.

Chapter VIII

Tables VIII.7 and VIII.8 These tables show guide figures indicating movements in profits as a percentage of capital. The profits are equal to the net profits before rent and interest less an assumed current rental.

The current rental was estimated as a multiple of the rateable value of the premises used by each enterprise. In arriving at this estimate we took advice from officials of the Inland Revenue and a leading firm of surveyors, valuers and auctioneers dealing in shop property. From this, and other information, we drew the following conclusions:

- (1) Rents were above rateable values in all the years dealt with by the report (1965-6 to 1968-9),
- (2) the ratio of rents to rateable values has been rising.

On the basis of details of rents supplied, we estimated that the correct multiple for 1965-6 should be of the order of 1.5. (In arriving at this we allowed for the fact that the figures obtained were generally for long-term leases at a fixed rent and hence likely to over-state the current market rent). To allow for the general rise in rents, we used the following multiples for subsequent years:

1966-7	1.55
1967-8	1.60
1968-9	1.65

These multiples cannot of course be expected to be accurate for particular properties, but should give a reasonable guide to the overall picture.

Chapter IX

Retailing: Table IX.1 The broad method adopted in calculating the index of movements in productivity for the DAE enquiry was as follows. For each firm the figure for sales per £ of payroll was adjusted for changes in the price of goods and for changes in standard wage rates and employers' National Insurance contributions. The wage adjustments made were those appropriate to each firm's financial year and differed from trade to trade (see below). The figures for individual firms were then aggregated. Within a trade an unweighted average was taken (see Appendix B); the overall figure was obtained by weighting the trade figures according to gross profit as derived from the Census of Distribution. Finally an adjustment was made for earnings drift.

The details of the adjustments made are described below:

Price Changes

The adjustments for price changes for individual firms were made on the basis of price indices for different types of business supplied specially by the Board of Trade. They are constructed using the commodity breakdown derived from the Census of Distribution and the DEP's figures for changes in commodity prices. These indices were only supplied on an annual basis and we made no allowance for the financial year end of individual firms.

Standard Wage Rates

The wage rates used were those laid down by the relevant Wages Councils and other national wage agreements. In each case we took the hourly minimum wage rate (calculated on the basis of the standard working week) for an adult female shop worker (or equivalent) in the 'Provincial A Area'. A moving average

was taken to cover each firm's financial year. The source of the information was Department of Employment and Productivity, 'Time Rates of Wages and Hours of Work'.

The rates taken for each trade were:

<i>Agreement:</i>	<i>Trades:</i>
Retail Cooperative Societies	Co-ops, department stores and miscellaneous (except chemists and booksellers)
Retail Food Trades	Food
Retail Newsagency, Tobacco and Confectionery	Confectioners, tobacconists, newsagents
Retail Drapery, Outfitting and Footwear	Clothing and footwear
Retail Furnishing and Allied Trades	Household
Retail Pharmacy Trade	Chemists
Retail Bookselling and Stationery Trade	Booksellers

The correspondence between the 'Agreement' and the 'Trade' was very good apart from the first item.

Earnings Drift

The sources on which we relied were (i) the survey of earnings and hours of selling-staff in retail shops made by the Department of Employment and Productivity in May 1965, 1966, 1967 and 1968 (*Employment and Productivity Gazette*, Dec. 1965, Dec. 1966, Dec. 1967 and Dec. 1968), and (ii) a comparison of the movements of payroll and of full-time-equivalent men employed for those firms in the DAE enquiries for which this information was available, (iii) discussion with the firms interviewed and other knowledgeable persons in the trade.

The information derived from these sources suggested that the increase in standard wage rates had understated the rise in labour costs per man hour between 1965-6 and 1966-7 by about 1 per cent. Because nominal wage rates were being held down by the incomes policy, the difference for 1966-7—1967-8 was rather higher—1½ per cent. Finally, for 1967-8—1968-9 the reverse effect was in operation and we did not allow anything for earnings drift. These adjustments were made on a global basis with the same earnings drift being applied to all trades, although this is probably not strictly justified.

Table IX.2 The derivation of the series for numbers engaged is described in Appendix D. The output series was specially supplied by the Board of Trade and is on a comparable basis to the employment figures.

Table IX.3 The Census comparison figures show the change in volume of sales per FTE person engaged. The method by which these figures were calculated is described below.

Volume of Sales The basic series for value of sales was supplied by the Business Statistics Office. It excludes general mail order houses.

The adjustments for price increases were as described above (Table IX.1), with the exception that an alternative adjustment based on the retail price index was used for the household goods category.

Full-Time-Equivalent Employees The basic series for full-time and part-time persons engaged were supplied by the Business Statistics Office. They were converted to a full-time-equivalent basis by counting one part-time person as 0.4 of a full-time person.

In order to bring the figures for different Census years onto a comparable basis, the following adjustments were made:

- (i) The 1957 employment figure was adjusted to an organisation basis.
- (ii) The 1961 employment figure was adjusted for non-response.
- (iii) 1957 and 1961 figures were adjusted so that the trade classification was consistent with that for 1966.

Table IX.5 The derivation of the series for numbers engaged is described in Appendix D. The output series was specially supplied by the Board of Trade and is on a comparable basis to the employment figures.

Wholesaling: Table IX.4 The procedure adopted in calculating the movement in productivity from the DAE enquiry was similar to that for retailing. The adjustments made for price and earnings increases over the period are described below.

Price Changes

Trade

- (1) Confectionery, tobacco, footwear, textiles, millinery, floor coverings, toys, stationery, electrical goods, pottery and glass, hardware, pharmaceuticals, wool, steel, agricultural machinery, machine tools, engineering products, equipment for motor vehicles
- (2) Non-ferrous scrap metal merchants
- (3) Builders' merchants
- (4) Vegetables, fruit, books, newspapers and periodicals
- (5) Agricultural Merchants
- (6) Poultry

Index Used (source)

Wholesale price indices for commodities produced in the UK (Board of Trade Journal) and supplementary information supplied by Board of Trade.

Wholesale price index for commodities wholly or partly imported into the UK (copper) (Board of Trade Journal).

Price index of materials purchased (house-building materials) (Board of Trade Journal).

Index of retail prices (Monthly Digest of Statistics).

Index of agricultural prices (compound feeding stuffs) and supplementary information supplied by the Ministry of Agriculture, Fisheries and Food.

Index of agricultural prices (poultry).

In those cases where the index related to manufacturers' (or producers') prices, an adjustment was made for any significant changes in gross margin indicated by the DAE enquiry.

Earnings Since there is no direct source of information about the movement of earnings in the wholesale trades, we assumed that they increased at the same rate as those of manual workers in manufacturing and certain other industries (as published in *Statistics on Incomes, Prices, Employment and Production*). An addition was made to this for the increase in employers' National Insurance contributions.

DISENTANGLING THE EFFECTS OF SET

This appendix is divided into sections, corresponding with the various items for which we have attempted a 'disentanglement'.

I. PRODUCTIVITY IN RETAILING AND RETAILING-CUM-WHOLESALE

This section sets out in detail the basic data used in the productivity analysis, and also presents more fully some of the calculations which were made. This is done for the Retail Trades, the analysis of which is found in Chapter XI, and also for the Retail and Wholesale Trades combined, which are referred to in Chapter XII.

1. *The Basic Data*

The basic data for the retail trades and retailing and wholesaling combined is shown in Table F.1. The indices of the volume of sales were specially supplied by the Board of Trade so as to align as closely as possible to the employment

TABLE F.1 *Output, Employment and Productivity, 1954 to 1968*
(Index numbers 1954=100)

	Retail Trades			Retail and Wholesale Trades ¹	
	Volume of Sales	Employment	Productivity	Employment	Productivity
1954	100.0	100.0	100.0	100.0	100.0
1955	104.6	102.2	102.3	102.4	102.1
1956	106.1	102.9	103.1	103.4	102.6
1957	109.1	103.8	105.1	104.9	104.0
1958	111.5	103.0	108.3	104.2	107.0
1959	117.5	105.5	111.4	106.6	110.2
1960	122.4	107.2	114.2	108.1	113.2
1961	125.9	106.9	117.8	107.8	116.8
1962	126.5	107.0	118.2	108.6	116.5
1963	131.9	108.0	122.1	109.9	120.0
1964	136.0	108.0	125.9	109.9	123.7
1965	139.7	107.0	130.6	109.3	127.8
1966	141.7	105.9	133.8	108.1	131.1
1967	143.8	103.9	138.4	106.0	135.7
1968	147.1	101.4	145.1	103.8	141.7

¹ The employment figures cover only non-industrial wholesaling; productivity is calculated by dividing these into the index of *retail* sales volume. See text for reason.

figures. Gas and electricity showrooms are thus excluded from the output figures, and mail-order business is included. The employment figures are those derived in Appendix D (see final row of figures in Tables D.12 and D.14) in index number form.

2. The Explanatory Variables

Three explanatory variables are used in the econometric approach to the explanations of productivity changes—the degree of tightness in the labour market, changes in the volume of sales, and the initial deficiency or excess of employment. For the first two variables the values used in the analysis are the deviations of the value for each year from the average annual value over the period 1955 to 1965. In the case of the initial deficiency or excess of employment, however, the average value is close to zero so that the annual figures are used as they stand. The details are shown in Table F.2.

TABLE F.2 *The Explanatory Variables, 1955 to 1968*
(Percentages)

Year	The Labour Market		Volume of Retail Sales		Initial Deficiency of employment as a percentage of required employment	
	Percentage vacancies in second year	Deviation from average percentage vacancies 1955-65	Percentage change over previous year	Deviations from average percentage change 1955-65		
					Retail	Retail and wholesale
	(1)	(2)	(3)	(4)	(5)	(6)
1955	1.89	0.59	4.60	1.50	1.09	1.18
1956	1.64	0.34	1.43	-1.67	0.97	1.16
1957	1.26	-0.04	2.83	-0.27	-0.68	-0.68
1958	0.91	-0.39	2.20	-0.90	-1.17	-1.55
1959	1.02	-0.28	5.38	2.28	-0.58	-0.97
1960	1.40	0.10	4.17	1.07	-0.09	-0.18
1961	1.41	0.11	2.86	-0.24	0.00	0.28
1962	0.93	-0.37	0.48	-2.62	0.65	1.19
1963	0.85	-0.45	4.27	1.17	-1.32	-1.40
1964	1.36	0.06	3.11	0.01	-0.46	-0.55
1965	1.64	0.34	2.72	-0.38	0.18	0.27
1966	1.58	0.28	1.43	-1.67	1.38	1.26
1967	1.07	-0.23	1.48	-1.62	-0.25	-0.06
1968	1.17	-0.13	2.29	-0.81	-0.83	-0.89

For the labour market and the volume of retail sales, the data used are the same for the analysis of both the retail trades separately, and retail and whole-sale trades combined.

In the case of the labour market variable this is because we have used the overall labour market situation, which is the relevant magnitude since we are concerned with the general ease or difficulty which employers in the distributive trades experience in attempting to recruit labour. There are a number of alternative measures of labour market tightness which could have been used, such as the percentage of unemployment, the ratio of the number of vacancies to the number of unemployed, and the percentage of vacancies. The use of unemployment percentages would mean putting too much emphasis on an increase in the slackness of the labour market when the situation was already slack, as in

1962-3 for instance when the rate of unemployment increased from 2.0 per cent to 2.5 per cent. As compared to this, unemployment percentages give too little weight to the increasing tightness of the labour market when it is already tight—as in 1964-5 for example, when the rate of unemployment fell from 1.6 per cent to 1.4 per cent. The ratio of vacancies to unemployment is a better indicator but we were concerned in particular about the change in the relationship between these two variables which occurred during 1967-8, when unemployment remained high while other indicators such as reported vacancies and the amount of overtime working were suggesting some degree of tightening in the labour market situation. Consequently we decided to measure the state of the labour market by reference to the figure for percentage vacancies.

The use of the volume of retail sales as an indicator of the 'output' of retailing and non-industrial wholesaling combined is based on the consideration that the job of the distributive trades can be viewed as one of getting goods from the producer to the consumer, and from this point of view, the question whether they go through a wholesaler is irrelevant. This view provides some justification for taking the output index for retailing to reflect the combined output of retailing and wholesaling and using the labour statistics for the two put together. There are, of course, objections to this. For instance, the weighting of the components in the retail output is not strictly appropriate when it is to cover the wholesale stage as well, and some of the activity of the wholesalers is in the distribution of goods which do not pass to the retailer (e.g. exports or petroleum products). However when we are concerned with *movements*, the difficulties are rather less important, and the fact that they apply both before and after the introduction of SET should mean that our estimate of the 'effect' is less upset than might seem likely.

The last two columns in Table F.2 show the initial percentage deficiency or excess in employment. This variable is defined as:

$$\frac{\text{required employment} - \text{actual employment}}{\text{required employment}}$$

where 'required employment' is derived by dividing the output index by the trend value of productivity. For each year the initial deficiency or excess is calculated by reference to the relevant employment figures in the previous year—i.e. the first year of the two between which the change is being measured.

3. *The Equations*

Apart from simply fitting a logarithmic trend, two sets of equations have been used in the econometric analysis.

The first relates the deviations of productivity from the log trend to the degree of overall tightness in the labour market. The equations are shown in Table F.3. The equations show the regression coefficient, the standard error of the coefficients (in brackets) and the square of the correlation coefficient, which gives the degree of statistical explanation.

The second, and more elaborate, set of equations relates the percentage *changes* in employment to the three explanatory variables shown in Table F.2. The equations for retailing, and retailing and wholesaling combined are shown in Table F.4.

TABLE F.3 *Regression of Deviations of Productivity from Log Trend on the Degree of Tightness in the Labour Market, 1954 to 1965*

	Constant	Regression coefficient	r ²
Retail	-2.35	1.79 (0.62)	0.45
Retail and Wholesale	-2.77	2.09 (0.72)	0.46

TABLE F.4 *Regression of Percentage Changes in Employment on Selected Explanatory Variables, 1954-5 to 1964-5*

	Constant	Regression Coefficients of Explanatory Variables			R ²	\bar{R}^2
		$\Delta O - \Delta \bar{O}$	D	V - \bar{V}		
Retail	0.786 (0.209)	0.793 (0.173)	1.246 (0.443)	-2.010 (0.999)	0.76	0.62
Retail and Wholesale	0.931 (0.245)	0.733 (0.223)	0.961 (0.414)	-1.766 (1.122)	0.62	0.40

$\Delta O - \Delta \bar{O}$ = deviation of percentage change in output from average percentage change 1954 to 1965.

D = initial deficiency in employment.

V - \bar{V} = deviation of tightness in labour market from average tightness 1955 to 1965.

The employment changes predicted by the equations are then used along with the actual output changes to derive the predicted changes in productivity.

The predicted employment changes are shown in column (6) of Tables F.5 and F.6. The Tables also show the contribution of each explanatory variable to the predicted value. The contribution of each variable is obtained by multiplying the observations for each year by the relevant regression coefficient shown in Table F.4. Thus in retailing the contribution of the output variable, for instance, is obtained by multiplying the figures in column (4) of Table F.2 by 0.793.

Having arrived at a 'prediction' of the number of people at work between one year and the next, the next step was to build up a series of the number 'expected' to be at work in each year. These figures are shown in Table F.7, together with figures showing the expected level of productivity.

TABLE F.5

*Contribution of Explanatory Variables to
Percentage Changes in Employment for Retailing*

Years compared	Con- stant*	Abnormal increase in output ($\Delta O - \Delta \bar{O}$)	Abnormal- ly high vacancies ($V - \bar{V}$)	Initial Defi- ciency (D)	Total 'Explained' on pre-SET rules	Unex- plained	Actual move- ment (per- centage)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1954 to 1955	0.786	1.19	-1.19	1.36	2.15	0.05	2.20
1955 to 1956	0.786	-1.32	-0.68	1.21	-0.01	0.69	0.68
1956 to 1957	0.786	-0.21	0.08	-0.85	-0.19	1.06	0.87
1957 to 1958	0.786	-0.71	0.78	-1.46	-0.60	-0.17	-0.77
1958 to 1959	0.786	1.81	0.56	-0.72	2.43	0.00	2.43
1959 to 1960	0.786	0.85	-0.20	-0.11	1.32	0.29	1.61
1960 to 1961	0.786	-0.19	-0.22	0.00	0.37	-0.65	-0.28
1961 to 1962	0.786	-2.08	0.74	0.81	0.26	-0.17	0.09
1962 to 1963	0.786	0.93	0.90	-1.64	0.97	-0.04	0.93
1963 to 1964	0.786	0.01	-0.12	-0.57	0.10	-0.10	0.00
1964 to 1965	0.786	-0.30	-0.68	0.22	0.03	-0.96	-0.93
1965 to 1966	0.786	-1.32	-0.56	1.72	0.62	-1.65†	-1.03
1966 to 1967	0.786	-1.28	0.46	-0.31	-0.34	-1.55†	-1.89
1967 to 1968	0.786	-0.64	0.26	-1.03	-0.62	-1.79†	-2.41

* This represents mainly the basic upward trend in output, less the basic upward trend in productivity.

† Includes 'SET Effect'.

TABLE F.6

*Contribution of Explanatory Variables
to Percentage Changes in Employment for Retailing and Wholesaling*

Years compared	Con- stant*	Abnormal increase in Output ($\Delta O - \Delta \bar{O}$)	Abnormal- ly high vacancies ($V - \bar{V}$)	Initial defi- ciency (D)	Total 'Explained' on pre-SET rules	Unex- plained	Actual move- ment (per- cent)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1954 to 1955	0.93	1.10	-1.04	1.13	2.12	0.28	2.40
1955 to 1956	0.93	-1.22	-0.60	1.11	0.22	0.76	0.98
1956 to 1957	0.93	-0.20	0.07	-0.65	0.15	1.30	1.45
1957 to 1958	0.93	-0.66	0.69	-1.49	-0.53	-0.14	-0.67
1958 to 1959	0.93	1.67	0.49	-0.93	2.16	0.14	2.30
1959 to 1960	0.93	0.78	-0.18	-0.17	1.37	0.04	1.41
1960 to 1961	0.93	-0.18	-0.19	0.27	0.83	-1.11	-0.28
1961 to 1962	0.93	-1.92	0.65	1.14	0.81	-0.07	0.74
1962 to 1963	0.93	0.86	0.79	-1.35	1.24	-0.04	1.20
1963 to 1964	0.93	0.01	-0.11	-0.53	0.30	-0.30	0.00
1964 to 1965	0.93	-0.28	-0.60	0.26	0.31	-0.86	-0.55
1965 to 1966	0.93	-1.22	-0.49	1.21	0.43	-1.53†	-1.10
1966 to 1967	0.93	-1.19	0.41	-0.06	0.09	-2.03†	-1.94
1967 to 1968	0.93	-0.59	0.23	-0.86	-0.28	-1.80†	-2.08

* This represents mainly the basic upward trend in output, less the basic upward trend in productivity.

† Includes 'SET Effect'.

TABLE F.7 *Expected Levels of Employment and Productivity for
Retailing and Wholesaling, 1954-1968*
(Index numbers 1954=100)

Year	Retailing		Retailing and Wholesaling	
	Expected Employment*	Expected Productivity	Expected Employment*	Expected Productivity
1954	101.0	99.0	101.2	98.8
1955	103.2	101.4	103.3	101.3
1956	103.2	102.8	103.5	102.5
1957	103.0	105.9	103.7	105.2
1958	102.4	108.9	103.2	108.0
1959	104.8	112.1	105.4	111.5
1960	106.2	115.2	106.8	114.6
1961	106.6	118.1	107.7	116.9
1962	106.9	118.3	108.6	116.5
1963	107.9	122.2	109.9	120.0
1964	108.0	125.9	110.2	123.3
1965	108.1	129.3	110.6	126.3
1966	108.7	130.3	111.1	127.6
1967	108.4	132.7	111.2	129.4
1968	107.7	136.6	110.9	132.7

* The *average* of the index numbers for 1954-1965 is equated to the *average* for actual employment.

II. PRODUCTIVITY IN NON-INDUSTRIAL WHOLESALING

Our object in this section is to present the data underlying the analysis of productivity in the non-industrial wholesale sector which was carried out in Chapter XII.

The basic data on output, employment and productivity is shown in Table F.8. The output series was supplied specially by the Board of Trade. It is not so reliable as the one for retailing. Nevertheless it is an improvement over the figures which were available in official published sources because of the attempt by the Board of Trade to make an allowance for the growth in the wholesale activities of retail multiples.

The employment figures in Table F.8 were derived from information supplied by the Department of Employment and Productivity as explained in Appendix D. They are, in index number form, the last row of figures in Table D.14.

As explained in Chapter XII, the deviation of productivity from the logarithmic trend are well 'explained' by deviations of output from its four-year moving average. The values of these variables for each year from 1954 to 1968 are shown in Table F.9.

The statistical relationship between the percentage deviations of productivity from trend (Y) and the percentage deviations of output from the four-year moving average (X), is given by the equation

$$Y = -0.271 + 1.710 X \quad r^2 = 0.70 \\ (0.351)$$

Finally the expected deviations of productivity from trend for each year, as given by the above equation, are added to the trend value for the year to give an expected productivity index from 1954 to 1968. This together with the actual productivity is shown in Table F.10. The third column in the table gives the percentage difference between the actual and expected productivity for each year.

TABLE F.8 *Output, Employment and Productivity for Non-Industrial Wholesaling, 1954 to 1968*
(Index numbers, 1963 = 100)

Year	Output	Employment	Productivity
1954	76.5	84.4	90.6
1955	80.5	86.9	92.6
1956	82.8	89.1	92.9
1957	84.4	92.7	91.0
1958	85.8	92.5	92.8
1959	89.6	94.0	95.3
1960	94.0	94.5	99.5
1961	96.5	94.7	101.9
1962	97.1	98.0	99.1
1963	100.0	100.0	100.0
1964	103.3	100.0	103.3
1965	105.8	100.9	104.9
1966	107.7	99.6	108.1
1967	108.4	97.6	111.1
1968	112.0	96.9	115.6

TABLE F.9 *Deviations of Productivity from Trend and Deviations of Output from Four-Year Moving Average for Non-Industrial Wholesaling, 1954 to 1968*

Year	Productivity		Output	
	Logarithmic trend (index numbers)	Percentage deviations from trend (per cent)	4-year moving average (index numbers)	Percentage deviations from 4-year moving average (per cent)
1954	89.9	0.8	76.1	0.5
1955	91.2	1.5	79.5	1.3
1956	92.4	0.5	82.3	0.6
1957	93.7	-2.9	84.6	-0.2
1958	94.9	-2.2	87.1	-1.5
1959	96.2	-0.9	90.0	-0.4
1960	97.5	2.0	92.9	1.2
1961	98.9	3.0	95.6	0.9
1962	100.2	-1.1	98.1	-1.0
1963	101.6	-1.6	100.4	-0.4
1964	102.9	0.4	102.9	0.4
1965	104.4	0.5	105.3	0.5
1966	105.8	2.3	107.4	0.3
1967	107.2	3.6	109.4†	-0.9†
1968	108.7	6.3	111.4†	0.5†

† Partly estimated because assumptions had to be made about the level of the index of output in 1969 and 1970. The figures are based on our best guesses of the level of output in these years.

TABLE F.10 *Actual and Expected Productivity for Non-Industrial Wholesaling, 1954 to 1968*

Year	Actual Productivity	Expected Productivity	Percentage Difference
1954	90.6	90.5	0.1
1955	92.6	93.1	-0.5
1956	92.9	93.2	-0.3
1957	91.0	93.0	-2.2
1958	92.8	92.1	0.8
1959	95.3	95.2	0.1
1960	99.5	99.3	0.2
1961	101.9	100.2	1.7
1962	99.1	98.2	0.9
1963	100.0	100.6	-0.6
1964	103.3	103.3	0.0
1965	104.9	105.0	-0.1
1966	108.1	106.0	2.0
1967	111.1	105.4	5.4
1968	115.6	109.3	5.8

III. GROSS AND NET MARGINS IN RETAILING

This Appendix describes in greater detail the 'simulation exercise' that was outlined in Chapter XIII, and the method of using its results. Most of the data used in this exercise have been obtained from the National Income Blue Book. From the Blue Book table on Consumers' Expenditure at Current Prices an estimate of expenditure on goods sold by the retail sector was obtained by summing those individual items of expenditure which correspond broadly to goods sold through shops.¹ The series is given in Table F.11 and is called 'sales'. These figures were the denominators of the two sets of ratios, called here dummy margins, which were prepared for the simulation exercise.

Gross Margins

For our dummy gross margin, the numerator ought to be the gross profit obtained by retailers on the sales of the above goods—i.e. broadly the value of sales, less the cost of the goods sold. The nearest that we could get to this was the Blue Book figure for the gross domestic product of the distributive trades. This is *too high* in so far as it covers wholesaling (including industrial wholesaling) as well as retailing, and *too low* in so far as it covers only income from employment *plus* gross profits (before tax or depreciation, and including the income of the self-employed)—i.e. it omits the expense items, other than labour and the costs of the goods.² There are also some other, less important, discrepancies.

¹ The specific items included are: Food; Tobacco; Fuel and light (excluding gas and electricity); Clothing; Durable Goods (not including Motor Vehicles); Other Household Goods; Books, Newspapers and Magazines; Chemists' Goods; Miscellaneous Recreational Goods; and Other Miscellaneous Goods. The principal uncertain cases are Alcoholic Drinks, some of which are sold through shops, and tobacco, some of which is sold in public houses, but the series is, in effect, only needed for inter-year comparisons in percentage terms.

² This means that it omits SET, but we are essentially concerned with 1954 to 1965. For 1966, on the one occasion when we needed that year, we added an estimate for SET paid by the distributive trades.

Clearly this Blue Book series is not a good approximation, and a comparison with the Census of Distribution shows that the figures are too high. But we want them only for a very limited purpose: to study the *proportionate* deviations of the calculated gross margin from its trend, and for this purpose it is only *short run-percentage movements* which matter. It did not seem too unreasonable to assume that the omissions and the wrongful inclusions would move in much the same way in relation to retail sales as the true gross profit: and there is always the consoling thought that the income generated in retailing, which is included, is much the biggest item.

In this way, then, a ratio was obtained, called the 'dummy gross margin' (DGM), which is defined as the ratio of the gross domestic products of the distributive trades to the sales figure defined above. The calculation of the figures for the dummy gross margin is shown in Table F.11.

The dummy gross margin series behaves quite reasonably in the light of what we know in general about retail margins, in particular there is a clear upward trend. Fitting a trend by least squares one obtains:

$$\text{Dummy Gross Margin} = 26.6 + .26(T - 1954) \quad \bar{r}^2 = .87 \\ (.21) (.03)$$

where T is the year.¹

Given this trend it is now possible to calculate the deviations in any year from the trend value and so classify years according to whether they were above or below trend. The deviations are given in Table F.12.

The next stage in the exercise was to ask whether any explanation could be provided for these deviations from the trend, or whether they had to be regarded as the result of random influences not amenable to analysis with the data available to us. It turned out that it was possible to explain a great deal of the fluctuation of the DGM series about its trend by means of two economically relevant indices:

- (i) The percentage rise in prices 'during the year'—i.e. comparing its final quarter with the final quarter of the preceding year.
- (ii) The percentage by which the volume of sales in the year differed from a four-year moving average centred on it.

Both these influences were statistically significant and had the right sign from the economic point of view. Alternative and additional explanatory factors were tried, but the two indicators just mentioned, which were chosen on *a priori* grounds, gave the best explanation.

The figure for the volume of sales was obtained from the Blue Book table on Consumers' Expenditure at Constant Prices, linking the series using different base years to form an index number series for 1952 to 1967. From this series a four-year moving average was obtained for the years 1954 to 1965.²

The percentage difference between this moving average and the actual volume of sales index was taken to measure the extent to which sales were high or low in that particular year.

The index of the change in prices was obtained by preparing a sub-index from the Index of Retail Prices, using only the price rises for those categories

¹ The figures in brackets are the standard errors of the coefficients. \bar{r}^2 , the measure of the proportion of variance explained, is corrected for degrees of freedom.

² The average was centred as follows: the figure for 1957, for example, was obtained as the average of one quarter of the sum for the years 1955 to 1958 and one quarter of the sum for the years 1956 to 1959. Thus the average is equivalent to an average of five years with the weights equal to $\frac{1}{4}$, $\frac{1}{4}$, $\frac{1}{4}$, $\frac{1}{4}$, $\frac{1}{4}$. The reason for choosing a four-year moving average was that this seemed best to eliminate such cyclical movements as were discernible.

TABLE F.11

Calculation of the Dummy Gross Margin

£m

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966*
(i) Value added by distributive trades	1968	2150	2274	2375	2435	2584	2771	2888	3029	3192	3419	3594	3813
(ii) Sales	7346	7895	8350	8750	9038	9434	9823	10232	10627	11052	11578	12143	12655
(iii) Dummy Gross Margin (per cent)	26.8	27.2	27.2	27.1	26.9	27.4	28.2	28.2	28.5	28.9	29.5	29.6	29.8

* For 1966 the row (i) contains £42 million of SET

TABLE F.12

Deviations of the DGM from Trend

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
Trend value	26.6	26.8	27.1	27.3	27.6	27.9	28.1	28.4	28.7	28.9	29.2	29.4	29.7
Deviation of the DGM from trend	0.2	0.4	0.1	-0.2	-0.7	-0.5	0.1	-0.2	-0.2	0.0	0.3	0.2	0.1

Note:

The trend is fitted for the years 1954-65 only, since there is some effect of SET in the 1966 figure. The deviation for 1966 is given for reference.

that correspond broadly to the items included in the sales total. The index was computed by taking the average value of the index for each group for the months October, November, and December in each year, forming from this an overall price index for the required categories in the fourth quarter of the year; the value of this computed price index was then expressed as a percentage increase on the corresponding value for the previous fourth quarter.

The values of the sales and price increase indices described above are given in Table F.13.

Results of the Analysis of Dummy Gross Margins

There are two slightly different approaches to investigating the influence of price increases and sales volume on gross margins. One can either take the deviation of the dummy gross margin from its trend as the variable to be explained, or one can take the level of the dummy gross margin itself as the variable to be explained. In the latter case the year will become one of the explanatory variables, for the trend in the gross margin percentage will be one of the explanations of the level in any particular year. In principle these two statistical approaches are not necessarily equivalent¹ but it would not be surprising if they did in fact give closely similar answers and this is indeed what happens in the present case.

From the point of view of presentation it is simplest to present the results in terms of the dummy gross margin as the dependent variable, including time as one of the independent variables. The explanation of the deviations of the DGM from its trend is given in footnotes.

The linear regression of the DGM percentage on the index of sales minus a moving average (S), the index of the price increase (P), and the year (T) gives²:

$$(1) \quad \text{DGM} = 26.42 + .10(P - 2.7) + .22S + .27(T - 1954) \quad r^2 = .94$$

(.19) (.04) (.12) (.02)

This relation, which is quite good from the statistical point of view, indicates that there is an upward trend in the dummy gross margin percentage of .27 per annum (this approach gives a slightly steeper trend than that obtained from considering the influence of T alone). Apart from this, the DGM can be expected to exceed the trend value by about .10 for each percentage point that the price increase on the previous fourth quarter exceeds 2.7 per cent (the average value for the period 1954 to 1965); the DGM can also be expected to exceed the trend value by .22 for every 1 per cent by which the volume of sales in that year exceeds a centred four-year moving average.

It will be seen below (in Table F.14) that both price and sales effects are important in quantitative terms when one seeks to explain movements in the DGM.

¹ The two approaches might give different answers, for example, if one of the explanatory variables had a trend itself. This reflects the fact that there is then a problem of separating the influence of time as such from the influence of this variable.

² The figures in brackets are the standard errors of the coefficients. \bar{r}^2 , the measure of the proportion of variance explained, is corrected for degrees of freedom. The reader is warned that this equation relates to the *dummy* gross margin: the method of arriving at expected gross margin is described on page 306 onwards.

TABLE F.13
Explanatory Factors for Gross Margin Analysis

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967*	1968
Percentage by which volume of sales exceeds 4-year moving average	0.66	0.96	-0.21	0	-0.90	0.10	1.12	0.64	-0.91	0.18	0.44	0.09	0.17	-0.17*	0.25*
Price increase (per cent)	3.4	6.6	2.1	2.8	1.7	-0.3	1.2	3.2	2.2	1.7	4.5	3.6	3.0	1.2	5.9

* In estimating the four-year moving average, the index number of sales for 1969 and 1970 were based on the predictions of the National Institute's Economic Review for November 1969.

TABLE F.14
'Prediction' of Dummy Gross Margins

	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965
1. Actual Dummy GM	26.79	27.23	27.23	27.14	26.94	27.39	28.18	28.23	28.50	28.89	29.53	29.61
2. Actual Increase (2 years)			.44	-.09	-.29	.25	1.24	.84	.32	.66	1.03	.72
3. Predicted Increases = sum of: Two years trend			.54	.54	.54	.54	.54	.54	.54	.54	.54	.54
Different Price Effect*			-.13	-.38	-0.04	-.31	-.05	.35	.10	-.15	.23	.19
Different Sales Effect**			-.19	-.21	-.15	.02	.44	.12	-.45	-.10	.30	-.02
4. Total			.22	-.05	.35	.25	.93	1.01	.19	.29	1.07	.71
Hence												
5. 'Unexplained' Movement			+.22	-0.04	-.64	.00	+.31	-.17	+.13	+.37	-.04	+.01

* Defined as the product of the difference between the increase in the price index for the two years and the price coefficient .10.

** Defined as the product of the difference between the sales index for the two years and the sales coefficient .22.

Working with the deviations as the variable to be explained one obtains the identical coefficients for price and sales effects; so in this case the two approaches mentioned above turn out to be equivalent.¹

The Prediction of Gross Margins

It is of some interest to know how well we would have predicted margins during the period 1954 to 1965 using the trend that we have estimated and the estimated influences of price increases and sales levels. We are particularly interested to know how far out we would have been when 'predicting' two years ahead since we will want eventually to decide whether any changes between 1965 and 1967 which we might be tempted to attribute to SET might equally well be due to unexplained random movements, such as the series has exhibited in the past. For this purpose—i.e. predicting *changes* in margins—it is of course the *differences* between the price effects in (say) 1954 and 1956 which is important—and similarly for the sales effects.

Table F.14 shows the results of this exercise and incidentally shows that both the price effect and the sales effect are quantitatively important and do not always pull in the same direction.

The test is, in a sense, 'too easy', in that we are using the period over which the equation was fitted. Nevertheless it is encouraging to find that the unexplained movement averages only 0.19 (taking the 'errors' without regard to sign). If we had used the trend alone the average would have been 0.38—just twice as great.

Adjustment of Census Data to Estimate the Trend

The trend in the DGM series is of no use to us, because the various errors in its numerator (both inclusions and exclusions) may well have a trend themselves, which could be (and indeed is) quite important when taken over a decade. The Census of Distribution data are much the most relevant series, but the three figures available might be (say) above trend in the first year and below it in the last, because of conjunctural factors. We have seen in the case of the dummy gross margin that the effects of price increases and sales levels are of considerable quantitative importance, and it is not unreasonable to suppose that the same may be true of the real figures for gross margins published in the Censuses.

This brings us to the first main purpose of the 'simulation exercise' which is to use the data provided by the dummy gross margins to adjust the margins in the Census of Distribution for the conjunctural factors, and so have a better basis for calculating the true trend. To do this we take the Census figure for each year, and adjust it by the ratio of the DGM *trend* to the DGM *actual* for that year.

¹ Denoting the deviations of Table F.12 by DDGM one obtains a regression relation of the form:

$$(2) \quad DDGM = - \underset{(.12)}{.082} + \underset{(.04)}{.10} P + \underset{(.11)}{.22} S \qquad \bar{r}^2 = .52$$

Of course the coefficients of this relation are only 'identical' to those of relation (1) in the rounded form as presented here. In other words, the two approaches gave closely similar results differing only in the third decimal place.

The reduction in \bar{r}^2 as compared with the previous equation simply reflects the fact that it is much more difficult to get a high value when one is explaining deviations from trend. 'There is much less left to explain.'

The logic behind this procedure is simply that one is assuming that whatever it was that caused the DGM to be slightly below its trend value in 1957 would have had the same proportionate effect on the Census gross margin. As the trend figure for the DGM in 1966 is calculated by using pre-SET experience, we assume that this argument applies in that year also, and that the 1966 Census figure which emerges is the right one to use in fitting a pre-SET trend.

The results of the exercise are shown in Table F.15; fortunately the adjustments needed are relatively trivial, because the Census years were fairly well on trend, so that the statistical hazards of our procedure are not of great quantitative importance.

TABLE F.15 *Calculation of Trend for Census Gross Margin*

	1957	1961	1966
Census gross margin	23.3	24.9	26.7
DGM: Actual	27.1	28.2	29.8
DGM: Trend	27.3	28.4	29.7*
Estimated Census 'trend'	23.5	25.1	26.6*

* These are the trend figures 'in the absence of SET'.

The three adjusted estimates for the Census do not lie exactly on a straight line: the line of best fit shows a rise of 0.35 per year.

It might be argued that this should be adjusted, before applying it to the gross margin shown by our own enquiry, for the fact that the gross margin in our sample is not exactly equal to that given by the Census. The difference is however very small, and one could also argue that the trend should *not* be adjusted in this way, so we have taken this trend as directly applicable to our data.

Adjustment of the Conjunctural Factors

The econometric analysis established regression coefficients which should be applied to the price factor and the sales factor for any year in order to assess (essentially) the deviations from trend to be expected for that year. The analysis was done so as to arrive at these as *absolute* figures, rather than as percentages of the trend figure for that year, because economic logic made this seem at least equally plausible, and the computations were much easier: in other words, the answer comes out as so many *percentage units* to be added to the trend value of the *dummy gross margin*.

It would clearly, however, be wrong to use these regression coefficients as they stand for assessing the expected effect of the conjunctural factors on the gross margin of our sample (or of the whole retail trade): the dummy gross margin is consistently higher than either the Census margin or the margin in our sample (which we have just noted as being much the same).

We therefore reduced the regression coefficients in the ratio of the DAE gross margin in 1965 to the DGM for 1965 or by 12.5 per cent. This gives 0.088 for the price term and 0.194 for the sales term.

Application of the Results

We are thus able to compute the 'expected' increase in the gross margin for the DAE sample between 1965 and each subsequent year as the sum of three items:

- (i) A *trend* allowance of one, two or three times the annual trend addition of 0.35 percentage points, as the case may be.
- (ii) A *price movement* allowance, calculated as 0.088 times the *difference* between the price rise in the year in question and the price rise in 1965.
- (iii) A *sales effect* equal to 0.194 times the *difference* between the sales excess in the year in question and its value in 1965.

Net Margins

It is possible to obtain a dummy net margin figure in the same way as we obtained the dummy gross margin figure: using the same sales total in the denominator, the dummy net margin is defined as the ratio of gross profits and other trading income of the distributive trades (obtainable from the Blue Book) to the sales total. In this case however we had hoped to use an alternative source which seemed to give the data which are required without the various assumptions necessary to justify the interpretation of the dummy series. The Inland Revenue publish in their Annual Reports statistics of the share of trading profit in turnover of a sample of retailing companies reporting more than a certain total profit in the year in question. Thus it seemed that the net margin for retailing, unlike the gross margin, was already available in published form (although the series is not available after the figures corresponding with the calendar year 1963).

It emerged however on investigation that the definitions used by the Inland Revenue in arriving at these figures are not ideal for our purpose—for example, interest payments are excluded from the total profit—and the Central Statistical Office has informed us that they make a number of important adjustments to the figures which they obtain from the Inland Revenue to arrive at the total for gross profits that is published in the Blue Book. It seems likely therefore that the figures published in the Blue Book would have some advantages for the present purposes, to set off against the disadvantage of the indirect approach.

In consequence our first approach was to use the Inland Revenue's 'direct' figures, to see whether they could be related to price increases and sales levels in the manner which both economic reasoning and our investigation into gross margins had led us to expect. Here however we draw a complete blank, apart from establishing the very important fact that there is no real trend in their net margin series.

In consequence we fell back on trying the indirect method of using our dummy net margin series, and somewhat to our surprise we found that it worked very well. We frankly do not understand the reason for this contrast, but the obvious answer was to go ahead with this approach.

The figures for the dummy net margin are given in Table F.16.

As can be seen by inspection of Table F.16, there is no significant trend in the dummy net margin series, and this view was in fact confirmed by the statistical investigation: the addition of the variable *T* as an explanatory variable did not improve the fit, indeed it decreased the measure of variance explained (\bar{r}^2) because it reduced the degrees of freedom.

TABLE F.16

Series for Dummy Net Margin

	1954	1955	1956	1957	1958	1959	1960	1961	1962
Dummy Net Margin (per cent)	12.3	12.4	11.9	11.5	10.9	11.1	11.8	11.5	11.3
	1963	1964	1965						
Dummy Net Margin (per cent)	11.5	12.1	12.0						

Apart from the absence of a trend, we came out with very much the same type of result as that of the gross margin investigation. Both the rate of increase of the price index on the previous fourth quarter, and the measure of the level of sales were able to explain a large part of the variance in the dummy net margin series. The basic regression relation in this case was:

$$(6) \quad \text{DNM} = 11.64 + .154(P - 2.7) + .329S \quad \bar{r}^2 = .64$$

(.15) (.05) (.14)

where DNM denotes the dummy net margin. Once again, as in the case of the gross margins, both the effects of price increases and sales are quantitatively important.

Application of the Net Margin Results

As there is no trend in the profits/sales ratio, the only requirement is to adjust the regression coefficients so as to give answers in terms of 'percentage units for the Department's sample' instead of 'percentage units for the DNM'. This we did by a conversion factor based on 1965, in the same way as for gross margins—i.e. we reduced them in the ratio of 6.51 (the 1965–6 net margin in our retail sample) to 12.0 (DNM for 1965). The coefficients are then:

Price effect .084

Sales effect .178

The regression coefficient for the price effect is virtually the same as in the case of gross margins, which is what theory would lead one to expect: the effect of stock appreciation is to raise both types of margin by the same amount since both are percentages of sales.

The coefficient for the sales effect is also much the same, but theory would have led one to expect it to be rather bigger on net margins, because of the reduction in the expense ratio, on top of the gain in gross margin.

APPENDIX G

RATES OF SET

The Selective Employment Tax rates quoted below were effective in Great Britain from the dates shown. All rates are given *net of refunds* for part-time and elderly workers.

Hours Employed	5th September 1966	4th September 1967	2nd September 1968	7th July 1969
<i>Over 21 hours per week</i>	s. d.	s. d.	s. d.	s. d.
Men	25 0	25 0	37 6	48 0
Women; boys under 18	12 6	12 6	18 9	24 0
Girls under 18	8 0	8 0	12 0	16 0
Men over 65	25 0	25 0	12 6	16 0
Women over 65	12 6	12 6	6 3	8 0
<i>Over 8 and under 21 hours per week</i>				
Men (including over 65)	25 0	12 6	12 6	16 0
Women (including over 65)	12 6	6 3	6 3	8 0
Boys under 18	12 6	12 6	18 9	24 0
Girls under 18	8 0	8 0	12 0	16 0
<i>Under 8 hours per week</i>	No tax paid			

THE EFFECTS OF SET UPON RETAIL DISTRIBUTION IN NORTHERN IRELAND

Introduction

Whilst work was in progress in Great Britain, an enquiry was carried out into retailing in Northern Ireland under the direction of Professors Cuthbert and Parkinson at the Queen's University of Belfast. It was thought necessary to have this separate investigation because of the different effective rates of SET (see Table H.1) and the relatively high rate of unemployment in Northern Ireland. Lack of space prohibits a full inclusion of their results in this report; their main findings only are summarised below.

The Historical Background

From the outset, it must be made clear that information upon which an examination of recent trends on the retail trade in Northern Ireland can be based is extremely sparse. The only Census taken relates to 1965 and this gives no information on gross margins and profits. Since Census figures are available only for one year, it was necessary to rely upon National Insurance statistics for some indication of trends in employment; and upon the Northern Ireland Ministry of Commerce's index of retail sales, deflated by the UK Retail Price Index, as a guide to changes in volume of turnover. However, these series are not without their shortcomings. The employment series does not, of course, include non-insured workers and may therefore give an upward bias to the derived productivity index, especially if the proportion of non-insured workers has been increasing, as there is evidence to suggest. Similarly the use of the UK Retail Price Index as a deflator to obtain volume of sales is a second-best device in that the effects of the abolition of resale price maintenance may have had a more immediate impact in Great Britain than in Northern Ireland, and hence the index may understate the actual increase in prices in Northern Ireland. The effect of this, too, would be to give an upward bias to the productivity index.

However from the information available, the following general observations may be made on employment and productivity.

(1) There has been a decline in the total (insured) labour force in retailing since 1963; since 1966 it would seem that this rate of decline has accelerated. The build-up of the industry prior to 1963 primarily involved an increase in the number and proportion of females. The period from 1963 to 1966, however, saw a levelling off in the growth of female employment and a slight decline in the number of male employees. Since 1966 both male and female employment has declined, but male employment at a faster rate.

(2) The general trend in productivity, measured by volume of sales per person engaged in retailing, has been upward since 1960 and has tended to increase at an increasing rate. From the beginning of 1960 to mid-1963, productivity rose at a compound rate of 0.40 per cent p.a.; from mid-1963 to mid-1966 it increased at a compound rate of 1.57 per cent p.a.; and from mid-1966 to mid-1969 at a compound rate of 2.51 per cent p.a. However, as indicated above, these figures may overstate the actual increase.

TABLE H.1

Effective Rates of Selective Employment Tax

(Northern Ireland and Great Britain)

Period		Full-time workers		Part-time workers (8-20 hours)	
		United Kingdom	Northern Ireland	United Kingdom	Northern Ireland
5-9-66 to 1-10-67	Men	25s. 0d.	<i>12s. 6d.</i>	25s. 0d. until 3-9-67	<i>12s. 6d.</i>
	Boys	12s. 6d.	<i>8s. 0d.</i>	12s. 6d.	<i>8s. 0d.</i>
	Women	12s. 6d.	<i>12s. 6d.</i>	12s. 6d. until 3-9-67	<i>12s. 6d. until 3-9-67</i>
	Girls	8s. 0d.	<i>8s. 0d.</i>	8s. 0d.	<i>8s. 0d.</i>
2-10-67 to 1-9-68	Men	25s. 0d.	25s. 0d.	12s. 6d. from 4-9-67	12s. 6d.
	Boys	12s. 6d.	12s. 6d.	12s. 6d.	12s. 6d.
	Women	12s. 6d.	12s. 6d.	6s. 3d. from 4-9-67	6s. 3d. from 4-9-67
	Girls	8s. 0d.	8s. 0d.	8s. 0d.	8s. 0d.
2-9-68 to 2-3-69	Men	37s. 6d.	<i>25s. 0d.</i>	12s. 6d.	12s. 6d.
	Boys	18s. 9d.	<i>12s. 6d.</i>	18s. 9d.	<i>12s. 6d.</i>
	Women	18s. 9d.	18s. 9d.	6s. 3d.	6s. 3d.
	Girls	12s. 0d.	12s. 0d.	12s. 0d.	12s. 0d.
3-3-69 to 6-7-69	Men	37s. 6d.	<i>30s. 0d.</i>	12s. 6d.	12s. 6d.
	Boys	18s. 9d.	<i>15s. 0d.</i>	18s. 9d.	<i>15s. 0d.</i>
	Women	18s. 9d.	18s. 9d.	6s. 3d.	6s. 3d.
	Girls	12s. 0d.	12s. 0d.	12s. 0d.	12s. 0d.
7-7-69 to 31-8-69	Men	48s. 0d.	<i>30s. 0d.</i>	16s. 0d.	16s. 0d.
	Boys	24s. 0d.	<i>15s. 0d.</i>	24s. 0d.	<i>15s. 0d.</i>
	Women	24s. 0d.	24s. 0d.	8s. 0d.	8s. 0d.
	Girls	16s. 0d.	16s. 0d.	16s. 0d.	16s. 0d.
1-9-69 to 4-1-70	Men	48s. 0d.	<i>37s. 6d.</i>	16s. 0d.	16s. 0d.
	Boys	24s. 0d.	<i>18s. 9d.</i>	24s. 0d.	<i>18s. 9d.</i>
	Women	24s. 0d.	24s. 0d.	8s. 0d.	8s. 0d.
	Girls	16s. 0d.	16s. 0d.	16s. 0d.	16s. 0d.

Notes:

Special partial refunds have been in operation in Northern Ireland. Where the effective rate has differed in Northern Ireland, it has been italicised in the Table.

From 2nd September, 1968, men and women full-time employees over 65 in Northern Ireland (as in Great Britain) have received refunds equal to $\frac{1}{3}$ of SET payments.

TABLE H.2

Key relationships for 1965-6 and 1967-8

(All figures are expressed as a percentage of sales)

		All Re- tailers	Smaller Re- tailers	Large Re- tailers	Food	Clothing and Footwear	House- hold Goods	Misc- ellaneous
Gross	1967-8	26.5	26.0	27.3	24.4	26.7	27.0	26.7
Profit	1965-6	25.5	25.2	26.0	23.4	25.1	27.2	26.1
<i>Expenses:</i>								
Payroll	1967-8	10.2	8.7	12.7	9.8	9.9	11.1	10.7
	1965-6	10.1	8.5	12.5	9.7	9.7	10.9	10.5
SET	1967-8	0.7	0.6	0.7	0.8	0.6	0.7	0.6
	1965-6	—	—	—	—	—	—	—
Rates	1967-8	1.6	1.9	1.4	1.3	1.5	2.1	1.6
	1965-6	1.6	2.0	1.3	1.1	1.5	2.3	1.4
Other	1967-8	6.1	6.5	5.5	5.5	5.7	8.0	4.8
	1965-6	5.8	6.3	5.0	6.1	4.9	7.9	4.8
<i>Net Profit (before rent and interest)</i>								
	1967-8	7.9	8.3	7.0	7.0	9.0	5.1	9.0
	1965-6	8.0	8.4	7.2	6.5	9.0	6.1	9.4

The Northern Ireland Enquiry

The enquiry into retailing in Northern Ireland was carried out on a similar basis to that in Great Britain, consisting both of postal and interview approaches. The response rate was much lower in Northern Ireland, but the results broadly substantiate the picture presented in the previous section.

Total employment declined amongst the sample firms but by a lesser amount than that indicated by the National Insurance data. However, this was to be expected since only firms that were in existence in both 1965 and 1969 were included in the sample. All trade groups showed a fairly uniform contraction in the employment of men, the overall decrease in the proportion of men being virtually compensated for by an increase in the proportion of women with very little change in the proportion of boys and girls. Policy towards employment of part-time workers was mixed. Small firms as a whole reduced their employment of part-time workers; large firms employed more though the percentage only rose from 5.2 to 6.1 of their full-time employees. There has also been a significant move to replace part-time employees liable to SET by part-timers not liable.

It is of interest to note that despite the relatively high rate of unemployment in Northern Ireland, 44 per cent of firms interviewed said that they had experienced greater difficulty in recent years in attracting suitable employees, particularly females.

It appears from the answers received to the questionnaire that there has been a movement towards cost reduction; employers have taken a closer look at their labour requirements, and attempts have been made to economise by

introducing or extending self-service and self-selection, by reducing counter-staff, by reorganising deliveries, by reducing credit and hence the amount of bookkeeping, by tightening stock policy and cutting advertising.

Besides the move towards a reduction in the relative cost of selling, traders have shown a tendency to take advantage of opportunities to purchase their goods at keener prices. In part these changes have been the outcome of changes in the organisation of the wholesale trade, the development of 'cash-and-carry' and voluntary buying groups. In part they have been the outcome of the initiative of the retailer himself; the search for alternative suppliers, the switch from wholesalers to producers, and the organisational changes that enabled him to take full advantage of quantity discounts. By these means, together with an increase in mark-up, traders have endeavoured to increase their gross margins. As will be seen, these changes are reflected in the financial data. (See Table H.2).

At the same time retailers have been faced with a certain tightening in the services provided to them by their suppliers. Manufacturers and wholesalers alike appear to be increasingly reluctant to service small orders. Linked with this there had been a general rise in the costs of a host of ancillary services. It is not unexpected therefore that the majority of retailers interviewed did not feel that they could single out SET as having been of particular importance in their recent business decisions; rather it had been one of a number of contributory factors.

The financial data provided by the firms in this enquiry tends to confirm both *these* changes, the similarity of experience of businesses in Northern Ireland and Great Britain and the policy changes that they have made. This data is summarized in Table H.3 which shows a comparison of movements in key ratios between 1965-6 and 1967-8.

TABLE H.3 *Movements in Key Ratios, 1967-8 c.f. 1965-6*
(Percentage point changes)

	Northern Ireland	Great Britain
Gross Margin	+1.0	+0.7
<i>Expenses</i> ¹	+1.1	+1.2
Payroll	+0.1	+0.2
SET	+0.7	+0.7
Other ¹	+0.3	+0.3
Net Margin ²	-0.1	-0.5

¹ Excludes rent and interest.

² Before payment of rent and interest.

(It should be noted that the effective rates of SET in Northern Ireland were the same as in Great Britain between 2nd October, 1967 and 1st September, 1968. The effect of the special partial refunds is therefore likely to be small in the accounts of the year 1967 to 1968.)

In the case of gross margins there has been, in general, a small but persistent and fairly widespread increase from year to year. The main exception was the food group where competition had apparently become increasingly keen. The increase in gross margins over the period from 1965-6 to 1967-8 of 1.0 percentage points for all firms is slightly above that for the main enquiry—possibly a reflection of the smaller impact of the abolition of resale price maintenance in Northern Ireland.

However the increase in total expenses as a percentage of sales is very similar in Northern Ireland and Great Britain, 1.1 and 1.2 percentage points respectively. The movement in payroll and SET as a percentage of sales is the largest element of the cost increase. Other expenses in both cases increased by 0.3 per cent of sales, but in the case of Great Britain half the increase was accounted for by increases in rates which remained unchanged as a percentage of sales in Northern Ireland. Until 1966-7 the growth of other expenses was less rapid than the growth of sales for most trade groups in Northern Ireland. In the following year, however, it outstripped the growth of sales—possibly in some way due to the effects of SET on the cost of goods and services included in miscellaneous expenses. In the case of Great Britain other expenses increased as a proportion of sales over both periods, i.e. from 1965-6 to 1966-7 and from 1966-7 to 1967-8.

The overall result of these changes is that net margins declined by 0.1 percentage points in Northern Ireland (as against 0.5 percentage points in Great Britain). However, although net margins fell by only 0.1 percentage points over the two year period, they fell for all firms by 0.3 percentage points between 1966-7 and 1967-8, having risen by 0.2 percentage points between 1965-6 and 1966-7. This decline was apparently continued between 1967-8 and 1968-9. In Great Britain a steady decline was experienced throughout the three year period.

In brief, experience in Northern Ireland appears to have been broadly similar to that in Great Britain, except that realised gross margins have apparently increased by more in Northern Ireland, and the reduction in net profits as a percentage of sales has been much smaller.

APPENDIX I

We reproduce here a letter from the Chancellor, which we received after the 1969 Budget. This was duplicated and sent to firms in order to reassure them about the usefulness of our enquiry.



Treasury Chambers, Great George Street, S.W. 1
01-930 1234

7th May 1969

Dear Professor Reddaway,

Selective Employment Tax Enquiry

It has been suggested that my decision to increase the rates of S.E.T. this year means that I do not attach importance to the results of the impartial independent enquiry which you are making into the effects of the tax. I wish to reassure you that nothing could be further from the truth: my action reflected the painful necessity for a Chancellor to take decisions in the light of the best information which he has, and in 1969 this suggested that the increase of S.E.T. was the least undesirable way of raising the necessary additional revenue.

When your Report is ready, you can be certain that I shall review the tax and its working very carefully in the light of your findings: you can make this point plain to everyone from whom you seek information.

Yours sincerely,

Rog. T. Jenkins

Professor W.B. Reddaway



PREFACE

Prefaces provide a great opportunity for the author to deal with a number of awkward points which have accumulated during the writing of his book, and which can be clarified in a few carefully written pages in the preface—which can be composed when everything else is finished. I had a mental list of points which should be dealt with in this way, such as the reason why the Report does not include any formal theory of the working of imperfect competition.

Unfortunately, however, the target date for delivery has already passed, and it does not seem justifiable to hold it up for the writing of anything which is not absolutely essential. So far as the contents of the Report are concerned, therefore, I will confine myself to two points which can be made briefly, and which are highly relevant to an understanding of its significance.

First, the research on which the Report rests has involved us in the production of a large number of statistics which are subject to a considerable margin of uncertainty, but which in many cases are open to some sort of check for plausibility against other figures which we have arrived at independently. We draw attention in the Report to a number of cases where checks of this kind are possible, but there are many others where one can get a general 'feel' as to whether the figures seem to make a consistent whole or not. Under such circumstances it is possible to make out a case for adjusting the figures as originally calculated, so as to make the overall picture as consistent as possible, subject to the constraint that no individual figure should be moved outside the limit of what seemed plausible in the light of its own calculation. We have, however, always followed the opposite policy of arriving at the best estimate for each separate figure, in the light only of our knowledge about the factors determining it, and leaving these 'best estimates' untouched. Readers can, therefore, be sure that in applying whatever plausibility tests appeal to them, they are dealing with the figures as they emerged from processes which were kept rigidly independent. Similarly, when we report our own examination of the consistency of the figures which we are presenting (notably in Chapter XIII) we are discussing the consistency of a set of independently calculated figures, and *not* of figures which have already had adjustments made to them in order to improve the degree of fit in one context or another.

Secondly, we have not attempted to record in the Report more than a very small fraction of the tests which we applied to see whether (for example) an objection which might be made to some statistical procedure which we adopted had any quantitative importance or not. We have tried to set out what we did, but we have not attempted to describe at length the justifications for doing certain things and not doing others. This Report is both lengthy and slightly late: if we had attempted to include in it the full justification for all our procedures, it would have been very much longer and we would have been far behind our target date.

Acknowledgments

One other task remains which it would be unforgiveable to ignore, and that is to record my very sincere acknowledgment of help received from numerous quarters.

First of all, I must record my gratitude to Her Majesty's Government, which both financed the research and adhered most scrupulously to the principle that it should be done on a basis of strict independence: we decided what we should try to do, and how we should try to do it, and the Government did not seek to influence us in any way. On top of that, we have received a great deal of very helpful information from many Government Departments—notably the Treasury, the Department of Employment and Productivity, the Board of Trade, and the Board of Inland Revenue: we offer our thanks to all the officials in those Departments whose labours have been increased by our enquiries.

Next, I must record that this Report owes its very existence to the willingness of many people outside the Government's service to help: these include the secretaries of many Trade Associations, Chambers of Commerce and the like (listed in Appendix B) and—perhaps most deserving of all—the people who filled in our questionnaires and answered our apparently unending questions. To all these I offer most grateful thanks for their patience and cooperation.

On the academic side, I have had the most magnificent support from the members of the Department's research staff who were engaged in our work on the distributive trades, and whose names are recorded on the title page. A very special work of thanks is also due to the people from the lecturing side in Cambridge who have given extremely valuable assistance on a part-time basis—notably A. B. Atkinson, C. J. Bliss and K. D. George. To these I should add Professor Cuthbert, of the Queen's University of Belfast, who carried out a special enquiry into the experience of that country, as an adjunct to our own investigation in Great Britain.

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CONTENTS

	<i>Page</i>
PREFACE	i
 PART I INTRODUCTION AND METHODOLOGY	
CHAPTER I Our Assignment and its Difficulties	1
CHAPTER II The Line of Approach	5
Need for a Framework for Analysis	5
Some Preliminary Applications of the Criteria	10
Some Common Arguments Considered	16
CHAPTER III Data Problems	23
Two Main Approaches	23
Returns Collected by the Department	25
CHAPTER IV Disentangling the Effects of SET	29
Illustration from Employment and Productivity	29
Statistical Inadequacies	32
 PART II THE HISTORICAL RECORD	
CHAPTER V How Big a Factor is SET	34
Relationship of SET to Wages	35
SET in Relation to Sales and Gross Profits	36
SET in Relation to Profits.	38
Summary of Key Relationships	40
CHAPTER VI The Historical Record on Gross Margins	41
Retailing.	41
Wholesaling	44
CHAPTER VII The Historical Record on Expenses	47
Retailing.	47
Wholesaling	52
CHAPTER VIII The Historical Record on Net Profits	55
Profit/Sales Ratios for Retailers.	55
Profit/Sales Ratios for Wholesalers	59
Net Profits on Capital	61
CHAPTER IX The Historical Record on Productivity	64
Figures for Retailing	66
Figures for Wholesaling	69

	<i>Page</i>
PART III	THE EFFECTS OF SET
CHAPTER X	Preliminary Analysis 72
	Retailing 72
	Non-Industrial Wholesaling 78
CHAPTER XI	The Effects of SET on Productivity in Retailing 82
	Method of Disentanglement 82
	Changes in Employment since 1965 90
	Changes in Productivity since 1965 92
	Reliability of the Results 95
CHAPTER XII	The Effects of Productivity in Wholesaling 101
	Trend of Productivity and Deviations 101
	Actual and Expected Productivity 104
	Reliability of the Results 106
	Retail and Wholesale Trades Combined 107
CHAPTER XIII	The Effects of SET on Margins and Expenses 108
	The Process of Disentanglement 108
	Results for Post-SET Years 111
	Reliability of the Results 114
	Comments on the Figures 118
	Wholesaling 120
	General View of the Results 123
CHAPTER XIV	Further Effects of SET on Retailing 125
	Quality of Service 126
	Changes in Methods of Working 129
	Composition of Employment 132
	Number of Shops 138
CHAPTER XV	Further Effects of SET on Wholesaling 145
	Quality of Service 145
	Changes in Methods of Working 147
	Composition of Employment 152
CHAPTER XVI	The Effects of SET on Wholesaler-Manufacturer Competition 156
	Competition between Wholesalers and Manufacturers 157
	Assessing the Effects of the Anomaly 160
	The Effects of the Anomaly 166
	Possible Changes for Wholesalers 167
	Possible Changes for Manufacturers 171
	The Position of the Wholesaler 173
CHAPTER XVII	Miscellaneous Anomalies and Their Effects 175
	Transport 175
	Self-Employed Workers 177
	The Method of Assessing SET 182
	Anomalies within the Distributive Trades 183
	Competition with the Public Sector 186

	<i>Page</i>
CHAPTER XVIII The Effects of SET on Industrial Wholesalers . . .	187
The Coverage of Our Enquiries	187
Preliminary Analysis of the Effects of SET	188
Statistical Problems	189
Productivity	189
Costs and Margins	190
Quality of Service	192
Changes in the Method of Working	195
CHAPTER XIX Anomalies in Industrial Wholesaling and Their Effects	196
Distribution	197
Repair and Servicing Activities	200
Manufacturing	200
Changes in Wholesalers' Share of the Trade	201
The Effects of the Anomalies	201
Possible Changes to SET Rules for Industrial Wholesalers	202
The Rate of Tax	206
CHAPTER XX Main Findings and Guide to the Report	207
Logical Nature of the Enquiry	207
Productivity, Margins and Expenses	207
Other Statistical Findings	210
Anomalies in SET	211
The Historical Record	211
 APPENDICES	
Appendix A An Earlier Analysis of the Main Issues	212
Appendix B The DAE Enquiries	215
Appendix C Trade Association Data	263
Appendix D Labour Statistics for Distribution	270
Appendix E Notes on the Preparation of Statistics used in the Text	289
Appendix F Disentangling the Effects of SET	294
I Productivity in Retailing and Retailing-cum-Wholesaling	294
II Productivity in Non-Industrial Wholesaling	299
III Gross and Net Margins in Retailing	301
Appendix G Rates of SET	310
Appendix H The Effects of SET upon Retail Distribution in Northern Ireland	311
Appendix I Letter from the Chancellor	316

TABLES

Tables	<i>Page</i>
I.1 Scope of Selective Employment Tax, by 1958 SIC Classification	2
III.1 Response to Postal Questionnaires, by Types of Business	27
V.1 SET in relation to Cost of Labour, 1966	35
V.2 SET as a Percentage of Payroll (Excluding SET), 1967-8, by Types of Business	36
V.3 SET as a Percentage of Sales and Gross Profits, 1967-8, by Types of Business	37
V.4 SET at Wholesale and Retail Level, 1967-8, by Trades	37
V.5 SET in relation to Net Profits, by Types of Business	39
V.6 SET as against Higher Interest Rates, 1967-8, for Large Retailers and Traditional Wholesalers	39
V.7 Some Key Relationships, 1967-8, for Retailers and Traditional Wholesalers	40
VI.1 Gross Margins as a Percentage of Sales for Retailers, 1965-6 to 1968-9, by Trades	42
VI.2 Annual Percentage Movements in Percentage Gross Margins for Retailers, by Trades	43
VI.3 Gross Margins as a Percentage of Sales for Wholesalers, 1965-6 to 1968-9, by Trades	45
VI.4 Annual Percentage Movements in Percentage Gross Margins for Wholesalers, by Trades	46
VII.1 Total Expenses (Excluding Rent and Interest) as a Percentage of Sales for Retailers, 1965-6 to 1968-9, by Trades	48
VII.2 Payroll as a Percentage of Sales for Retailers, 1965-6 to 1968-9, by Trades	49
VII.3 Annual Percentage Movements in Payroll/Sales Ratio for Retailers, by Trades	50
VII.4 Other Expenses (Excluding Rent and Interest) as a Percentage of Sales for Retailers, 1965-6 to 1968-9, by Trades	52
VII.5 Payroll as a Percentage of Sales for Wholesalers, 1965-6 to 1968-9, by Trades	53
VII.6 Other Expenses as a Percentage of Sales for Wholesalers, 1965-6 to 1968-9, by Trades	54
VIII.1 Net Profits (Before Rent and Interest) as a Percentage of Sales for Retailers, 1965-6 to 1968-9, by Trades	56
VIII.2 Movements in Ratios Between 1965-6 and 1967-8, for Retailers, by Trades	57
VIII.3 Inter-Firm Diversity of Movements in Net Margins, 1965-6 to 1967-8, for Retailers, by Trades	58
VIII.4 Net Profits (Before Rent and Interest) as a Percentage of Sales for Wholesalers, 1965-6 to 1968-9, by Trades	59

Tables	Page
VIII.5 Movements in Ratios Between 1965-6 and 1967-8 for Wholesalers, by Trades	60
VIII.6 Inter-Firm Diversity of Movements in Net Margins, 1965-6 to 1967-8, for Traditional Wholesalers, by Trades	60
VIII.7 Guide Figures Indicating Movements in Profits as a Percentage of Capital for Large Retailers, by Trades	62
VIII.8 Guide Figures Indicating Movements in Profits as a Percentage of Capital for Wholesalers, by Trades	63
IX.1 Index of Movements in Productivity for Retailers, 1965-6 to 1968-9, by Trades	66
IX.2 Index of Output, Numbers Engaged and Productivity in Retailing, 1965 to 1968	67
IX.3 Annual Averages for Movements in Productivity in Various Periods for Retailers, by Trades	68
IX.4 Index of Movements in Productivity for Wholesalers, 1965-6 to 1968-9, by Trades	69
IX.5 Index of Output, Numbers Engaged and Productivity in Wholesaling, 1965 to 1968	70
XI.1 'SET Effect' in Terms of Manpower Saved, 1966 to 1968	92
XI.2 'SET Effect' in Productivity Terms	93
XII.1 'SET Effect' in Productivity Terms for Non-Industrial Wholesalers, 1965 to 1968	104
XII.2 'SET Effect' for Retailing and Non-Industrial Wholesaling Combined	107
XIII.1 Factors Determining 'Expected' Margins	110
XIII.2 Actual and Expected Movements in Gross and Net Margins for Retailers	112
XIII.3 Actual and Expected Expense Ratios for Retailing, 1965-6 to 1968-9	114
XIII.4 Consistency Test on Estimated Effects of Abnormal New Factors for Retailers, 1966-7 to 1968-9	115
XIII.5 Effects of Re-Weighting Margin Figures for the Six Largest Retailers	117
XIII.6 Effects of Abnormal New Factors on Payroll Costs in Traditional Wholesaling, 1966-7 to 1968-9	120
XIII.7 Effects of Abnormal New Factors on Net Margins in Traditional Wholesaling, 1966-7 to 1968-9	121
XIII.8 Effects of Abnormal New Factors on Gross Margins and Non-Payroll Expense Ratio in Traditional Wholesaling, 1966-7 to 1968-9	122
XIII.9 Consistency Test on Estimated Effects of Abnormal New Factors in Traditional Wholesaling, 1966-7 to 1968-9	122
XIV.1 Changes in Policy with Regard to Service since March 1966 for Retailers	127
XIV.2 Effect of SET on Plans to Introduce Self-Service or Self-Selection for Large Retailers	131
XIV.3 Effect of SET on the Relative Cost of Different Types of Part-time Labour at July 1969	133

Tables	Page
XIV.4 Composition of Labour Force for Large Retailers for April 1966 to April 1969	135
XIV.5 DEP Selling Staff Enquiry—Composition of Employment for May 1966 to May 1968	135
XIV.6 Changes in Policy on Types of Labour Employed for Large Retailers	137
XIV.7 Changes in Floor Space for England and Wales for 1965 to 1967.	138
XIV.8 Rateable Values for England and Wales for 1958 to 1968	139
XIV.9 Gross Fixed Capital Formation in New Buildings and Works by Retailers in the United Kingdom for 1959 to 1968	140
XIV.10 New Orders for Shops in Great Britain for 1964 to 1968	141
XV.1 Changes in Services Provided by Wholesalers, by Trades	146
XV.2 Measures by Wholesalers to Reduce Costs by, Trades	149
XV.3 Operating Ratios for Cash-and-Carry and Traditional Wholesalers	150
XV.4 Trade Associations' Answers about Closures and Mergers, by Type of Association	151
XV.5 Composition of Labour Force for Traditional Wholesalers for April 1966 to April 1969	153
XV.6 Changes in Policy on Types of Labour Employed for Traditional Wholesalers	155
XVI.1 Extreme Case in which a Manufacturer's Warehouse is Exempted	159
XVI.2 Traditional Wholesalers' Answers to Questions about the Existence of Competition Between Manufacturers and Themselves	161
XVI.3 Pattern of Trade for Wholesalers and Competition of Manufacturers, by Trades	163
XVI.4 Changes in Wholesalers' Share of Trade, 1965 to 1968, by Trades	165
XVII.1 Transport Costs for Wholesalers, 1967–8, by Trades	176
XVIII.1 Costs and Margins as a Percentage of Sales for Industrial Wholesalers, 1965–6 and 1967–8	191
XVIII.2 Changes in Services Provided by Industrial Wholesalers, by Trades	193
XVIII.3 Other Measures by Industrial Wholesalers to Reduce Costs, by Trades	194
XIX.1 Industrial Wholesalers' Answers to Questions about the Existence of Competition between Manufacturers and Themselves, by Trades	198
XIX.2 SET Refunds Obtained by Industrial Wholesalers, by Trades	199
XX.1 Gain in Productivity as a Result of Abnormal New Factors for Retailing and Non-Industrial Wholesaling, 1966 to 1968.	208
XX.2 Payroll Costs and SET for Retailers and Wholesalers for 1965–6 to 1968–9	209
XX.3 Movements in Retail Margins since 1965–6	209
B.1 Response Rate for Large Retailer Enquiry, by Trades	219

Tables	Page
B.2 Sales of Firms in DAE Large Retailer Enquiry Compared with Census 1966, by Trades	220
B.3 Response Rate for Wholesalers, by Trades	221
B.4 Trade Covered by Wholesale Enquiry; Traditional Wholesalers and Perishable Foods, by Trades	222
B.5 Weights used for Combining Trades for Retailers and Traditional Wholesalers	224
C.1 Trade Association Data: Retail Distributors Association	263
C.2 Trade Association Data: Cooperative Union	264
C.3 Trade Association Data: The Booksellers Association	265
C.4 Trade Association Data: National Federation of Wholesale Grocers	266
C.5 Trade Association Data: The Textile Distributors Association	267
C.6 Trade Association Data: Federation of Hardware Factors	268
C.7 Trade Association Data: Agricultural Machinery and Tractor Dealers Association	269
D.1 Number of Self-Employed Workers: Retail Trades, 1961 and 1966	271
D.2 Self-Employment: Retail Trades, 1954 to 1966	273
D.3 Self-Employment: Retail Trades, 1966 to 1968	274
D.4 Number of Self-Employed (Full-time Equivalent) Retail Trades, 1954 to 1968	276
D.5 Number of Employees: Retail Trades, 1957, 1961 and 1966	277
D.6 Number of Female Part-time Employees; Retail Trades, 1954 to 1966	279
D.7 Number of Male Part-time Employees: Retail Trades, 1954 to 1966	280
D.8 Number of Part-time Employees, Retail Trades, 1954 to 1966	281
D.9 Number of Employees in Employment from DEP Series and for the Census: Retail Trades, 1954 to 1966	283
D.10 Number of Part-time Employees: Retail Trades, 1966 to 1968	284
D.11 Number of Full-time Employees: Retail Trades, 1966 to 1968	284
D.12 Total Persons Engaged (Full-time Equivalent); Retail Trades, 1954 to 1968	285
D.13 Number of Employees in Employment from DEP Data: Wholesale Trades, 1954 to 1968	286
D.14 Total Persons Engaged (Full-time Equivalent): Wholesale Trades, 1954 to 1968	288
F.1 Index of Output, Employment and Productivity for Retailing and Wholesaling, 1954 to 1968	294
F.2 The Explanatory Variables, 1954 to 1968	295
F.3 Regression of Deviations of Productivity from Log Trend on the Degree of Tightness in the Labour Market, 1954 to 1965	297
F.4 Regression of Percentage Changes in Employment on Selected Explanatory Variables, 1954-5 to 1964-5	297
F.5 Contribution of Explanatory Variables to Percentage Changes in Employment for Retailing, 1954-5 to 1967-8	298

Tables	Page
F.6 Contribution of Explanatory Variables to Percentage Changes in Employment for Retailing and Wholesaling, 1954–5 to 1967–8	298
F.7 Index of Expected Levels of Employment and Productivity for Retailing and Wholesaling, 1954 to 1968	299
F.8 Index of Output, Employment and Productivity for Non-Industrial Wholesaling, 1954 to 1968	300
F.9 Deviations of Productivity from Trend and Deviations of Output from Four-Year Moving Average for Non-Industrial Wholesaling, 1954 to 1968	300
F.10 Actual and Expected Productivity for Non-Industrial Wholesaling, 1954 to 1968	301
F.11 Calculation of the Dummy Gross Margin, 1954 to 1966	303
F.12 Deviations of the Dummy Gross Margin from Trend, 1954 to 1966.	303
F.13 Explanatory Factors for Gross Margin Analysis, 1954 to 1968	305
F.14 'Prediction' of Dummy Gross Margin, 1954 to 1965.	305
F.15 Calculation of Trend for Census Gross Margin	307
F.16 Series for Dummy Net Margin, 1954 to 1965.	309
G.1 Rates of SET	310
H.1 Effective Rates of SET for Full-time and Part-time employees in Northern Ireland and Great Britain	312
H.2 Key Relationships for 1965–6 and 1967–8 for Northern Ireland	313
H.3 Movements in Key Ratios 1967–8 c.f. 1965–6.	314

FIGURES

XI.1 Trend of Productivity in Retailing, 1954 to 1968	84
XI.2 Deviations in Productivity in Retailing from Trend in Relation to General Vacancy Percentage, 1954 to 1968	86
XI.3 Actual and 'Expected' Productivity in Retailing, 1954 to 1965	89
XI.4 Productivity in Retailing, 1954 to 1968, and 'SET Effect'	94
XII.1 Non-Industrial Wholesalers: Productivity Trend, 1954 to 1965	102
XII.2 Non-Industrial Wholesalers: Percentage Deviations of Productivity from Trend in Relation to Percentage Deviations of Output from 4-year Moving Average, 1954 to 1965	103
XII.3 Non-Industrial Wholesalers: Actual and 'Expected' Productivity, 1954 to 1968	105

Effects of the Selective Employment Tax

First Report, on the
DISTRIBUTIVE TRADES

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